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KEY PERFORMANCE INDICATORS AS A POLICY IMPLEMENTATION TECHNIQUE

by

STEPHEN GAWLEY KERR ©

A thesis submitted to the Faculty of Graduate Studies and
Research in partial fulfilment of the requirements for the degree
of Doctor of Philosophy

in

Educational Administration and Leadership
Department Of Educational Policy Studies

Edmonton, Alberta

Fall 2000

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DEGREE:	Doctor of Philosophy
YEAR THIS DEGREE GRANTED:	2000

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The undersigned certify that they have read, and recommended to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled **KEY PERFORMANCE INDICATORS AS A POLICY IMPLEMENTATION TECHNIQUE** submitted by Stephen G. Kerr in partial fulfilment of the requirements for the degree of Doctor of Philosophy. in Educational Administration and Leadership.

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ABSTRACT

Key Performance Indicators (KPIs) are an important feature of management control systems, providing valuable feedback for planning and evaluation purposes. KPIs could also be viewed as a policy implementation technique—helping to define strategy and guide implementation decisions. The purpose of this study was to explore implementation of the Government of Alberta's accountability policy through KPIs in the Alberta Department of Advanced Education and Career Development (AECD). The specific focus of this study was the KPI project within AECD. A case-study approach was used to explore the implementation process.

This study revealed that KPI are a significant implementation tool. When KPIs are employed in the policy formulation and implementation process, policy implementation agents respond faster. KPIs have symbolic attributes that enable strategic messages to pass along the implementation chain very quickly. The organisational dynamics of implementation were carefully examined and this revealed there are some risks associated with using KPIs as a policy implementation technique. Individuals involved with the KPI project felt the same indicators contributed to both a coercive and supportive organisational atmospheres. Administrators must therefore be very careful to use other managerial techniques to ensure the KPIs reinforce the desired organisational environment. If used with care, the results of this study indicate that KPIs could improve the speed and clarity with which policies are implemented.

DEDICATION

This research is dedicated to the memory of my mother, Anne Kerr. She demonstrated the redeeming power of dedication and commitment every day of her life. Even the ultimate personal challenge did not weaken her unreserved love for her family. She was and is a constant inspiration.

ACKNOWLEDGEMENTS

I could not have completed this project without the patience, faith, and encouragement of several key individuals. Without their help I would not have been able to continue developing into a scholar.

Dr. Don Richards took an initial interest in my studies in 1995-6 and spent many hours with me. Without his patience I would not made the transition from accountant to researcher. Don introduced me to Dr. Margaret Haughey and Dr. Mike Andrews. Margaret prodded me into a higher understanding of research methods. Mike Andrews, my supervisor, has become a valued friend. He was always ready to provide timely advise and ponder the many issues that came up during this study. His faith in my abilities and constant encouragement helped me reach further than I thought I was capable of.

Dr. Jose da Costa chaired both my candidacy examination and final defence. His organised approach and patient help guided me through those important processes. Dr. Larry Beauchamp, Dean of the Faculty of Education and Dr. A. Boberg also provided timely and valued contributions to my progress.

Athabasca University employed me during most of my doctoral studies. The flexible work arrangements they provided made things much easier for my family than they otherwise would have been. President Ambrioux's personal interest in my progress was both encouraging and motivating.

My wife Cheryl has endured the many absences needed to complete this project. I am grateful for her interest in and support of my academic career. It is not easy to raise three children and handle the intellectual distractions of a Ph.D. candidate.

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Chapter One

Introduction to the Study

Key performance indicators (KPIs) are an important feature of management control systems, providing valuable feedback for planning and evaluation purposes. Recently, a subtle but critical transformation in the use of KPIs has emerged. KPIs are now being used to help define strategy and policy, to clarify what is expected, and thereby to increase administrative attention to key aspects of policy statements.

Quantifying all aspects of a policy or a strategy can lead to two significant types of problems. First, it is difficult to reflect a strategy accurately and adequately in quantitative terms. The second consideration is the administrative impacts that result. KPIs as a quantification of strategy have become more than feedback mechanisms–they are feed-forward mechanisms. This change elevates the symbolic significance or capital attached to KPIs because they are now definitions of expected performance. Consequently, administrators have an increased incentive to focus all their attention on the KPIs. In the short term it may be easier to increase KPI performance by engaging in opportunistic behaviour–only actions that have an immediate effect on the KPI will be taken. For example a company might select return on assets as a KPI to encourage better utilisation of assets. However, an administrator could elect to reduce expenditures on new technology so as to increase revenue and improve the current rate of return on assets. Such an action by the administrator defeats the long-term goal behind the KPI and heightens the need to evaluate the new use of KPIs.

Policy formulation and implementation are at once intertwined and separate processes. Discussions about policy formulation must consider how the policy will be implemented. Implementation experiences are used to modify and refine policy. These can also be regarded as separate processes. A sound formulation process emphasises thorough consideration of the external environment and available organisational resources. A sound implementation process occurs when administrators take steps to transform the complex web of systems and organisational behaviours to achieve a new policy direction. Pal (1997) described the complex relationship between policy formulation and design as shown in Figure 1.1.

		Policy Formulation	
		Good	Bad
Policy Implementation	Good	I	II
	Bad	III	IV

Figure 1.1. Policy Design and Implementation. (Pal, 1997, p.146)

Every administration wants to arrive in the situation represented by cell I in Figure 1.1 because the combination of good policy formulation and implementation represents the best possible conditions for organisational success. Ongoing policy discussions that take into account ongoing implementation experiences will increase an organisation's chances of achieving the results found in cell I. Cell II represents a weaker potential for organisational success because poor implementation processes offset good policy formulation. Given the complexities involved, cell IV, which represents the weakest chances for organisational success, cannot be dismissed as an unlikely event. The implementation of KPIs by the Government of Alberta represents an attempt to increase the probability of cell I results by increasing the linkage between policy formulation and implementation.

The Alberta Department of Advanced Education and Career Development (AECD) adopted the new application of KPIs in 1993. (In 1999, shortly after the time frame of this study, AECD and the Alberta Department of Education were merged into a new Alberta Department of Learning.) KPIs were the dominant feature of AECD policy documents and were used to clarify department strategy. AECD linked funding of post-secondary institutions to KPI achievement, which introduced a new sense of competition among institutions. When KPIs are part of a feedback loop, mediating variables—institutional mandates, financial reports, comprehensive performance evaluations, economic conditions, and social context—moderate opportunistic behaviour. If KPIs are to be used as feed-forward mechanisms, new variables are needed to achieve the same mediating effects on their use. My research has traced the development of KPIs by AECD in the implementation of the government's accountability policy. My goal for this work was to contribute to management accounting theory and practice by identifying the impact of this potentially valuable management control technique on organisations and policy implementation theory.

The chain of policy-implementing agencies involved in higher education, as in many types of corporate structures, is long–from government to AECD, to universities, and to academic departments. The long implementation chain weakens the policy implementation links. It has also resulted in an extensive set of public documents, which were used to communicate policy and implementation actions between agencies. Such complete documentation of the policy as it passes through the implementation chain is almost never available when implementation occurs within a single entity. Documentation and analysis of AECD implementation of KPIs as part of the Government of Alberta's accountability policy will add to the scarce stock of implementation cases that can be used to evaluate new developments in policy implementation theory (O'Toole, 1986).

The AECD KPI project provided an excellent case-study opportunity to consider the relative advantages and dangers of the new use of KPIs. Mazmanian and Sabatier's (1981) policy implementation model was selected to guide my study and a detailed justification of this selection is given in chapter three. Lerner, Goldberg, and Tetlock (1998) have documented cases where accountability systems failed. They theorised that KPIs will only be successful in special cases and that more research is needed to understand the conditions that make it suitable to use KPIs. Given that KPIs are such a powerful and popular administrative tool, it is therefore important to deepen our understanding about the use of KPIs as a policy implementation tool.

Purpose of the Study

The purpose of this study was to explore one aspect of implementing the Government of Alberta's accountability policy through KPIs in AECD. The specific focus of this study was the KPI project within AECD. The following six research questions guided the study. The research steps taken to address each of these questions are explained fully in chapter 3 and are described briefly under each question.

Research Questions

Question One

How was the Alberta Government's accountability policy developed?

The data for this question were obtained from official government documents and public literature. The Mazmanian and Sabatier policy implementation model (1981) was used to guide my initial search for documents. Analysis of the policy development was made with reference to the policy design literature.

Question Two

What was the impact of government policy on AECD policy?

The primary source of data was AECD documents concerning the KPI project. Key officials in AECD were interviewed to confirm the completeness of my document list, to probe for a deeper understanding of the intention of the documents, and to assess the faithfulness of my analysis of those documents.

Question Three

How did AECD develop its key performance indicators?

My exploration of this question was guided primarily by the document list that emerged out of my work on question 2. The Mazmanian and Sabatier (1981) policy model outlines the variables that influence policy development and implementation. I used their model to organise my exploration of this question and to increase the completeness of my perceptions and understanding of the processes that occurred. Interviews with AECD decision-makers were also used to confirm my findings.

Question Four

What outcomes did AECD expect from the introduction of KPIs?

The expected outcomes were found in the various policy papers leading up to and including the first reporting manuals. I also interviewed the Department officials involved in the development of the documents. This step ensured that I was aware of and followed up on the factors they considered important in the shaping of those documents.

Question Five

How did the university sector react to the introduction of KPIs?

University reactions are well documented in KPI reports, responses from the University Co-ordinating Council and the Confederation of Faculty Associations, and post-secondary institutions annual reports on new initiatives to take advantage of KPI incentives. I also interviewed selected members of the University Co-ordinating Council's KPI committee to gain assurance about my analysis and findings, and about the completeness of my document trail. Bolman and Deal's (1991) model was used to analyse the public reactions of the university sector and support my findings.

Question Six

How do the KPIs as an implementation technique reflect the accountability policy?

The Mazmanian and Sabatier (1981) model predicts that the final implementation of any policy will result in modification of the policy as the specifics are worked out at each layer of organisations in the implementation chain. This effect reflects the link between policy formulation and implementation. The documents and the confirming interviews to answer questions 2 through 5 were analysed sequentially to find changes in policy that occurred through the implementation process. The model was also used to identify likely areas of change in the policy, so that, by comparison with the actual outcomes, a more complete understanding was obtained. From this analysis I have suggested improvements to the conceptual model used to guide this study.

Discussion and Analysis

Policy formulation and implementation are processes through which the subjective construction of the social world occurs in the context of organisations. As a guide for my decisions about the data that I gathered and my analysis of that data, I used theories that have already considered how these social processes work.

The Mazmanian and Sabatier (1981) policy implementation model provided a framework to examine the use of KPIs in implementing the government's accountability policy in this case. The use of the model furnished a starting point to identify key variables, issues, and sources of data. However, there are many specific considerations and perspectives to take into account when reaching conclusions and recommendations from my findings. I used the Bolman and Deal (1991) model of frame analysis to organise my analysis and findings. This established social theory widened and enriched the consideration that I put into my analysis and conclusions.

Significance of the Study

This study is significant in three ways. First, it adds to the recorded documentation of the development of KPIs in AECD. The study also tested the effectiveness of the mid-level model developed by Bolman and Deal (1991) for organisational analysis. Finally, the study also identifies ways in which the policy implementation theory might be adjusted to reflect the knowledge gained from using KPIs in AECD. All three areas of significance hold implications for practising administrators by assisting them to better understand policy implementation and the use of KPIs. The examination of the use of KPIs by AECD led to suggestions for practical enhancements to the existing implementation models.

The implementation of the Government of Alberta's accountability policy and the application of KPIs in AECD was a significant development in the history of post-secondary education in the province. I am not aware of any major publication that traces the whole story. Although the story fits into the long tradition of Machiavellian stories about implementing the government's plans, this situation also reflects current trends and practices. The use of KPIs is particularly important, given the increasing attention on measurable accountability models. Documenting this story adds a current case to the literature for studying implementation, and records an important period of adjustment in AECD.

It is not possible to consider policy questions without making assumptions about the policy decision process. Dye (1978) suggested six low-level theories to shed light on the decision factors: group theory, elite theory, rationalism, institutionalism, game theory, and systems theory. The theories are referred as low-level, in relation to policy studies, because of the emphasis on personal interaction. The six theoretical models suggested by Dye have frequently been used by students in the Department of Educational Policy Studies to shape their data collection efforts. Pisesky (1992) used them for her study about implementation of new high school graduation requirements. Application of the models helped Pisesky identify differences in perception between implementation agents. Burger (1988) used the same approach to investigate implementation of a teacher evaluation policy. In Burger's case, the method resulted in significant insights into the mythical or symbolic aspects of teacher professionalism that were not evident at the start of the study. Bosetti (1986) faithfully followed the same method to investigate implementation of a new secondary school policy and curriculum. Through this method, she also discovered a rich set of observations that contributed to her findings.

It is evident that the use of multiple approaches low-level theories for analysis has helped previous implementation researchers reduce their personal biases and take into a account a wider variety of factors in their research. However, the low-level theories do not take into account the role of organisations. Theories, which integrate the effect of organisations and other groups on social processes, are referred to as mid-level theories. Bolman and Deal (1991) have developed one such mid-level organisational theory that relies on four different frames to analyse situations: structural, human resource, political, and symbolic. These frames guided my analysis of the implementation documents, resulting in a richer understanding of the organisational dynamics. I also used these frames to design my interview questions, which facilitated a thorough probe of the events that occurred between official documents. As a new approach to the analysis of an implementation case, application of the four frames is a potentially significant new research tool.

Designing and implementing policies to achieve accountability is a recurring administrative theme. Well before the advent of modern social science, administrators devoted considerable attention to the problem of implementation; for example, Machiavelli (1983) saw this problem as a key to his governmental successes and failures. Accountability models establish how administrators can justify and explain their actions or decisions.

Underlying the purpose of this study is what is gained and lost by using KPIs to increase accountability. Because of their inherit specificity, KPIs expand everyone's understanding and awareness of policy. As KPIs become more prevalent, it will be necessary to understand and appreciate the impact of them on the implementation process. Administrators can respond to KPIs with specific forward-thinking initiatives to creatively address the policy focus communicated through the KPIs. However, it might also be possible to demonstrate excellent KPI performance through data manipulation and thereby to skilfully avoid making difficult changes–in other words, KPIs might make it easier to pervert the goals of accountability systems. Existing implementation models do not explicitly consider the role of KPIs in the implementation process, and so this study highlights important new considerations to add to the existing implementation models and practices.

Context of the Study

The size of the accumulated debt of the Government of Alberta is not well understood, perhaps because the debt developed quickly and during a time when the economy looked fairly prosperous. Until the mid-eighties Alberta enjoyed low taxation and balanced budgets. An unexpectedly long drop in oil prices led to deficits, which rapidly increased to $2,120 million in 1991/92 and $3,855 million in 1992/93 (Perry, 1997). Ralph Klein started his term as premier in 1993. Alberta's 1992/93 deficit was 25% larger than Ontario's deficit in relation to gross domestic product and 40% higher than the national average (Perry, 1997). This deficit situation was far worse than in any of the Maritime Provinces, generally regarded as the poorest provinces in Canada. The resulting political discourses contributed to intense public interest in Alberta's fiscal situation (Taft, 1997).

Premier Getty started building the backbone of an accountability policy in 1992. The government gathered together groups of Albertans to solicit their ideas. The discussions helped increase public awareness of accountability issues, even though the participating groups were carefully engineered (Lisac, 1995). A summary of the discussions was published as the *Simpson Report* in 1992.

The *Simpson Report* established an important initial tenet regarding government accountability by reporting that Albertans wanted government to manage the policy process. Rather than deliver services directly, government would establish clear expectations for service agencies and then closely and publicly monitor their operations. This process contrasts sharply with the expectation that a government will manage issues. The influence of books such as *Reinventing Government* (Osborne & Gaebler, 1993) is evident in the *Simpson Report*. Government was becoming more entrepreneurial through the separation of service delivery from legislative responsibility (Brook, 1989). This philosophy, referred to as new public management, was quickly adapted by the Alberta Cabinet (Evans, 1997) along with mechanisms to show the government was holding the agencies accountable.

Prior to the 1993 election, two separate initiatives to define the accountability policy were started; these formed the basis for subsequent implementation initiatives. The Premier's Office developed and released a new economic strategy, called *Seizing Opportunity* (Alberta Premier's Office, 1993). The plan reinforced the new role of government and established measurement standards. The Provincial Treasurer reinforced this approach with a series of consultations that he referred to as budget roundtables, beginning in March of 1993. Out of these discussions, the Treasurer developed the report *A Better Way: A Plan for Securing Alberta's Future*, which was released just after the election (Alberta Treasurer, 1994a). The report was hailed as the first business plan for the government and it included specific goals and measures for each department, including AECD. However, many of the plans were vague and came with a promise to develop more detail during 1994/95.

Following the 1993 election, four separate steps established the accountability policy at the government level. First, Treasury took an active role in shaping departmental plans by requiring three-year business plans from each department, and also by tightly establishing the criteria for those business plans. Second, Alberta's Auditor General (AG) added his support through new audit initiatives (Auditor General, 1994). The AG announced an emphasis on comprehensive auditing, which included a careful assessment of the goal-setting process and progress towards goals. (CCAF, 1993). The third step was establishment of an annual report card to provide specific information about progress towards the stated goals of each department (Alberta Provincial Treasurer, 1994a). The fourth and final step was to develop an Accountability Act to elevate responsibility for measurable goals and to report progress into a legal requirement (Alberta Legislature, 1996). The Act also extended the reporting requirements to every institution receiving public funds, including universities.

AECD anticipated the Government's policy direction and published its own policy interpretation, *Accountability Expectations of the Public Post-Secondary Institution Sector* in October 1993. This document indicated AECD would pursue accountability by creating a framework for adult learning and increasing responsiveness, access, and affordability. These goals are reflected in the Department's first business plan. Following the issuance of the 1994 to 1996 business plan as part of *A Better Way*, AECD went about developing its vision for adult learning. Following a limited set of consultations because of the bounds set by the business planning process, a policy document was released in 1994, *New Directions for Adult Learning*. This work clarified the broad accountability goals of AECD: accessibility, responsiveness, affordability, and research excellence.

According to AECD, accountability is achieved when the government and post-secondary institutions take responsibility "for the way in which resources are allocated and for demonstrating to the public that results are being achieved" (AECD, 1993, p. 2). For each of the accountability goals set out for AECD in the 1994/96 three year business plan, specific measures were proposed to justify the resource allocations. It was also clear these measures would be used to demonstrate the Department's accountability to the public: "This means demonstrating to Albertans that the post-secondary system is prepared to examine the way in which it is organised and operates, has the capacity to innovate and respond to those it serves, and delivers high quality services in an efficient manner" (AECD, 1993, p. 1).

Within the Department, new initiatives arose to ensure that every post-secondary institution helped AECD to achieve the accountability goals. First, an Access Fund was established to support competitive proposals to deal with problem areas. Second, a project was set up to develop a system-wide set of KPIs to monitor systems and institutional performance. A third group was established to implement performance funding. Each of these initiatives was to be developed in conjunction with the affected stakeholders. However, the consultative process was bounded by deadlines imposed by Treasury. It was not clear whether this was a signal that consultation with post-secondary institutions was not important, or whether the deadlines were to ensure the process was completed in a timely manner.

Implementation Context

The institutional framework (government, AECD, universities, colleges, faculties) of the higher education system has a strong influence on how the policy process operates. Brook (1989) points out the delegation of education to universities has political advantages for society, but leaves the government with only indirect control mechanisms, such as board appointments. Epstein (1983) and others have identified measuring as an important two-way communication tool in such circumstances. First, requiring measurement symbolically shifts responsibility to the university. The measures also give the university a legitimate way to structure their activities for public reward. This process in Canada, according to Aucion and Bakvis (1988), can be traced back to the 1960 Glassco Commission. That Commission foresaw a need for a performance emphasis in public policy, and suggested Canadian governments can be more responsive and responsible by moving management of programmes out to agencies. Similar perspectives, known as New Public Management, were adopted in the United Kingdom and New Zealand. The accountability policy adopted by the Government of Alberta was consistent with these developments in policy analysis.

Universities are public institutions in Alberta and are structured to defend certain historic principles of learning, not to adapt to rapid change. Post-secondary institutions, therefore, have largely independent boards to carry out their mandates. In Alberta, post-secondary institutions are also dependent on the government as the largest single source of operating revenue. This dependency creates an opportunity for implementation conflict. According to Birnbaum (1989), "the allocation decision is primarily a political one of who gets what, when, and how, and in a democratic and pluralistic organisation, political processes are appropriate means for resolving such political issues" (p.136). The politics within a post-secondary institution and the wider political environment influence post-secondary accountability discussions.

This investigation into the use of KPIs to implement a government policy included consideration of the impacts on post-secondary institutions. In the language of Pal (1997), the institution and its faculties are the final agency in the implementation chain. As the agency providing education services to students, each institution and faculty has its own managerial and control systems. According to Zeibell and DeCoster (1991) the broad purpose of control is to monitor and guide actions so that the policy goals set out for the organisation are accomplished. The institution and faculties are also expected to consider their self-interests in the process of interpreting and implementing policy. The post-secondary institution as the delivering agency has the ability to customise its offering to best accomplish the policy goals established by government and AECD. Self-interest could also lead to an unnecessary dilution of policy intentions, so the incentives for responding to policy were considered in the literature search.

Accountability in the context of high public debt is an important policy goal of the Government of Alberta. To pursue the notion of implementing agencies further, the definition of a goal must be considered closely. According to Wilson,

> By a goal I mean an image of a desired future state of affairs. If that image can be compared unambiguously to an actual state of affairs, it is an operational goal. If it cannot be so compared, and thus we cannot make verifiable statements about whether the goal has been attained, it is a general goal. (1990, p. 350)

The accountability steps taken by AECD were an attempt to ensure that goals are clear and attainment can be demonstrated. As Epstein (1983) has observed, accountability structures provide strong communication about where to look for ideas, and provide clues to managers about legitimate ways to present themselves.

An important reason for using private agencies to carry out government policy is that they are generally believed to be far more efficient than government departments. Considerable evidence exists that confirms and disputes this efficiency advantage (Wilson, 1990). Brook (1987) provides some rationale for circumstances when agencies may be more efficient. First, a private organisation has less situational ambiguity. A government department gets caught in the entire fabric of government goals, while private managers can focus on the principal service. This advantage also makes it easier to measure and reward success in the private sector.

As a consequence, the possibility of personal payoffs provides a strong motivation to discover how to increase the selected KPIs. The third factor is that in authority structures, public agencies tend to support several initiatives, and so a significant number of stakeholders have a say in structural and operational decision making. The private manager has greater direct control over these aspects of organisational life. However, all of these benefits depend on a narrow definition of efficiency that excludes democratic involvement from the equation.

Given the use of KPIs by the Government of Alberta and the link to resource allocation, Brook's concept of private capitalists within the public sector was particularly relevant. The government indirectly funds faculty units though strategic and budgetary processes used by universities. Government is the largest single source of university funding. For example, government funding represented 50% of the University of Alberta's operating budget in 1994 (Judge, 1999). However, the process of allocating funds to faculty units and attracting other revenues brings into play the dynamics of a private institution. Implementation of the accountability policy is therefore affected by the managerial control systems used by the institution. These factors contribute to the tractability of the accountability policy and the potential for administrators to influence change. This was taken into consideration in the analysis section of this study.

As predicted by Cameron (1982), the current accountability emphasis, grounded in an environment of funding reductions, will produce harsh competition. The Treasurer, in *A Better Way*, noted the positive effects such intense circumstances will produce. In fact, there is considerable policy planning support for this belief. For instance, Dror (1987) noted that the normal incrementalism of policy development would lead to a deficit in creativity and relevance. He concluded such deficits are eliminated through a controlled period of adversity. Decisions made by accountants about the presentation of information and financial policies shape perceptions about deficits. Belkaoui (1989), when discussing this phenomenon observed that the only way to get high effort, action, and outcome is to link the budget process closely and to reduce role ambiguity. KPI funding was seen as a way to achieve that link.

KPIs were the central policy tool that the government used to achieve their educational goals. The use of KPIs in this way elevates the capital attached to feedback systems, transforming them into feed-forward systems. In the tradition of Bourdieu, Chamboredon, and Passeron (1993), this result can be seen as a challenge to existing control and social exchange arrangements. In a traditional policy system, KPIs provide policy feedback, which is used in subsequent rounds of policy formulation or refinement. For example, Dror (1983) emphasised the importance of feedback and learning to support policy learning. He suggested that, by taking into account the types of stakeholders involved, it is possible to create, through rational processes, optimum policy models. This enthusiasm is shared by the Klein government, which embraced accountability as a natural process to ensure societal bliss (Lisac, 1995).

We all operate within a paradigm, which blocks out other possible interpretations of the same situation. Bourdieu (1991) and other sociologists remind us that research objects are created. Enthusiasm for KPIs as the mechanism through which accountability is demonstrated must be considered critically. The present study has considered the role of KPIs in the context of policy implementation and the effective use of KPIs in that context.

Delimitations

This research is delimited to the use and impact of performance measures by AECD to implement the government's accountability policy from 1992 to 1997. The primary source of data for my analysis was relevant public documents. Interviews were used to strengthen and clarify the trustworthiness of my document analysis. Two government and two university officials involved in the KPI project were interviewed.

Limitations and Assumptions

The perceptions of those I interviewed and my own orientations as an educator and management accountant limit this study. The documents I have used and the individuals I have interviewed have some indeterminable degree of hidden political agendas and responses to the KPI project. My own beliefs also had an impact on the outcomes of the study and on my analysis of the data. A practicum with AECD gave me privileged access to documents and processes of the Department before I began this study. As a professional management accountant accountability and measurement have been an integral part of my professional life. As an educator in the Alberta Post-Secondary system I have also experienced the pervasive impact of KPIs on myself and close colleagues. Due to these personal experiences I was predisposed to accept the use of KPIs as a tool in the implementation process.

This study is only one case about implementation and KPIs. Although the study contributes to implementation literature, many case studies will be needed to contribute conclusively to applicable theory. I also assume that the way I structured the deficit problem and accountability policy were tractable. There is a risk that alternative, equally believable, problem definitions could be made.

Definitions

Accountability

Accountability refers to the processes that we use to explain or justify the actions and decisions we have made. Accountability systems are meant to improve the quality of communication between individuals and organisations and thereby improve overall performance.

Policy

A policy is a course of action that is meant to contribute to the attainment of specified values and the resolution of a social problem. Policy processes are the public sector equivalent to strategic planning processes described in corporate literature.

Stakeholder

A stakeholder is an individual or group affected by a policy and policy decisions. The individuals and groups that qualify extend beyond members of the organisation who set the policy. Customers, clients, other members of the community, and related agencies are all affected by policy decisions and therefore also have a stake in policy decisions.

Implementation

Implementation is the process of executing a policy decision. It involves the elaboration of the policy through schemes and conceptions that lead to agreement among stakeholders. Implementation is also a process of communication. Implementation occurs in stages, making it almost impossible to determine when a policy is implemented.

Key Performance Indicator

A key performance indicator is a quantitative measure that is used to monitor progress towards a specific policy goal. The indicator clarifies the communication of policy goals by quantifying the desired outcomes or outputs.

Organisation of the Thesis

This first chapter offered a general introduction to the research problem, questions, and the two interrelated management aspects of the study. First, the policy context was described through a review of the accountability policy of the Government of Alberta. The implementation context was then discussed in relation to the use of KPIs in established implementation theory.

Chapter 2 includes a review of literature related to the research problem. It is divided into five sections entitled policy theory, accountability, implementation, management control, and change management. The chapter ends with a conceptual diagram of the research problem.

Chapter 3 describes the specific research procedures I have used to explore the research problem. The specific steps are supported with appropriate references to the research methodology literature. The chapter describes how the procedures helped me analyse the case and develop findings about how the players responded to the accountability policy.

Chapters 4 and 5 detail the implementation process and the use of KPIs as recorded in official documents and selected interviews. Specifically these chapters address research questions 1 through 5. Chapter 6 goes into more detail concerning question 5, that is the reaction of the university sector to the introduction of KPIs.

Chapter 7 addresses research question 6 how well the KPIs as an implementation technique reflect the accountability policy. The analysis is developed through the use of the four organisational lenses of Bolman and Deal.

Chapter 8 summarises the study and presents my findings, recommendations and conclusions. The chapter specifically includes my findings about the implementation model and the use of KPIs, and includes a revision of the conceptual diagram used in chapter 2 to formulate the research questions. I have also made recommendations about the use of the Bolman and Deal model to analyse a case study.

Chapter Two

Review of Related Literature

A review of the literature related to the research questions was conducted to establish a link between existing research and this study. A consideration of the contributions of those who have studied related questions guided and focused my research efforts. I have examined six sets of literature that were selected on the basis of their connection to the research questions. The topics discussed in the following sections of this chapter are policy context, development of an accountability policy by the Alberta Government, policy implementation models, management control literature related to change management, impacts of change on organisational behaviour, and accountability. This review resulted in the simplified conceptual structure for the study that is included at the end of this chapter.

Policy Context

The purpose of this study is to consider the use of KPIs. The policy context is very important, given that the implementation of the Government of Alberta's accountability policy was used as the case study. Creating public and corporate policy is complex because a web of interests and concerns must be accommodated. The need for compromise between competing policy interests adds to the complexity of the policy situation when it comes to implementation because of the ambiguity that such compromises introduce. Both the complexity and ambiguity limit the actions an administrator can take to achieve strategic goals. Understanding the operation of policy within an organisation is, therefore, an essential administrative skill. That understanding requires an awareness of the goals and policy concerns of the organisation.

Prominent policy writers consistently suggest that policy systems arise out of three elements: policy stakeholders, policy environment, and public policy (Dunn, 1981; Dye, 1978; Pal, 1997). Discussion of each element is a necessary prerequisite to increase our understanding of the implementation process. In the context of a university, as with most not-for-profit organisations, the list of stakeholders is large. Although a university is a private institution, it also works in a public environment. Consequently, the educational administrator is jointly involved in two policy environments. The university administrator must implement public policy in the context of a private organisation. Without good policy models, poor public policy, compounded by poor institutional implementation, is more likely to result than is solid policy that is implemented effectively (Pal, 1997).

Changes in the political environment are modifying the way policy analysis is approached (Osborne & Gaebler, 1993). According to Pal (1997), three important changes are occurring. First, government is expected to provide the governance mechanism, but not to actually run things. Linked to this movement is a trend towards smaller government. Finally, there is a post-modern attack on the rational tradition of policy analysis. However, the changes in the political environment have not changed the basic need for policy analysis. Policy, and how we implement it, is a fundamental social process through which conflicting visions are balanced (Dunn, 1981). All three of the aforementioned changes are resulting in an increased use of independent agencies to carry out policy. As the number of organisations in the policy implementation chain increases, so does the importance of communication to link the organisations together.

Policy establishes a contract, which links together the organisational community that will interpret and implement the intended policy impacts. The broad purposes of each organisation arise from established patterns of interaction and policy development. Bourdieu (1993) discusses the deep-rooted symbolic capital that develops around the way we organise social activity. He describes the intense reactions that follow when someone tries to betray the symbolism underlying established relationships. Schein (1985) identified this same phenomenon as a psychological contract. Even modern scholars who support the scientific management approach, such as Perrow (1986), recognise the importance of consistent human relations and political contexts in management processes. These mechanisms act like "glue" to help protect an organisation from fleeting fads and give managers a way to thwart any policy that is perceived to be ill-conceived. The same glue makes it difficult to bring an organisation's behaviour into line with a new policy direction. As a consequence, the popular management literature is full of techniques on how to implement transformational change.

Because implementation can be so difficult, it is an important consideration in the design of new policy, justifying the inclusion of policy background in an implementation study. Jenkins (1978) notes that it is not possible to assume any policy will be effective or implemented. The public policy literature is similar to the business literature in this regard. For example, Pal (1997) and Mazmanian and Sabatier (1981) describe a list of techniques that may be used to move things along. The suggestions are similar to recommendations made by Drucker (1992), Mintzberg (1994), and others to implement new directions in corporations. Recent organisational theory has concentrated on using multiple frames and considerations to understand all the policy dimensions that will have an impact on implementation. Morgan (1995), along with Bolman and Deal (1991), has demonstrated the usefulness of midlevel organisational theories for this purpose.

Accountability Policy

I followed the problem-sensing, conceptualisation, and construction steps developed by Dunn (1981) to map the policy problem created by the Alberta Government's debt. Alberta is a prosperous province with nearly 3 million residents. The province has a dynamic oil and gas industry. In addition, the provincial economy is diversified through strong agricultural, forestry, and technology sectors. Because of strong growth in key economic sectors, Alberta enjoyed relatively low taxation rates, growing government spending, and budget surpluses. When oil prices declined in the early 1980s, oil and gas royalty income declined rapidly and economic growth slowed. An anticipated recovery of oil and gas prices did not materialise, so by the end of the 1980s the level of debt service costs became a significant and growing fiscal issue.

By 1992, the annual deficits also become a dominant political issue. On a per capita basis, the Alberta deficit was one of the biggest among the provinces. Despite Alberta's natural advantage, the province was rapidly moving to the bottom of the fiscal pile. Trust in elected officials declined. Efforts to restore trust in the government's ability to manage public processes became important in this context. Klein became leader of the Progressive Conservative Party on 05 December 1992, following the retirement of Don Getty. Ralph Klein called a spring election, and campaigned on the theme of restoring confidence in government through improved processes to demonstrate accountability to the taxpayer. Klein presented the debt as a spending problem, rather than presenting the equally valid argument that select taxation rates were too low (Taft, 1997). The spending perspective led to the development of an accountability policy that was subsequently endorsed by the general election in June 1993.

The common link between all the accountability initiatives for the Government of Alberta is KPI usage. This connection appears to be routed in the Klein government's interest in Osborne and Gaebler's (1993) book *Reinventing Government* (Lisac, 1995). One of the authors' central ideas is that you do not really have a goal until you can specify the expected outcomes in measurable terms. This view echoes the ideas of many business theorists, such as Drucker (1992). Hence, for the professions, things like degrees, practice reviews, and misconduct complaints defined quality. For post-secondary education, the talk shifted to accessibility and efficiency. For students, the emphasis turned to programme satisfaction. With increased tuition came privatisation of large parts of the educational experience to isolate the measurement of satisfaction of each service. For example, student housing, food services, and bookstores have been contracted out to speciality firms, which disconnect these services from the post-secondary institution for measurement purposes.

KPIs became the vehicle through which accountability is demonstrated and, in fact, defined what the accountability policy means. Of course the institutions that have to work with this unbounded use of KPIs face the troubling difficulties associated with accounting for performance (Townley, 1996). Universities serve many purposes and goals, so a clear description of a university is almost impossible to find, and may not be properly reflected by any set of KPIs (Dennison, 1998). However, a clear description is needed to evaluate progress. In Canada, the need for a clear definition is approached in two different ways. One group has decided a description is not possible, so the only way to mediate the many conflicting goals of a university is a democratic governance process. These approaches support evaluation on the basis of independent control over teaching and research through peer processes within universities. The second approach is to define and communicate the community's expectations to the university carefully. From this approach, universities are free to make any teaching and research decisions they want, provided specific outcome goals are achieved. Obviously, these approaches are very different ways of regarding independence.

The democratic governance approach to university accountability found favour in Canada in the 1960s. Sir James Duff carefully enunciated a vision of Canadian universities free from external pressures, which would become dynamic academic communities within society (Duff & Berhahl, 1966). He recommended careful attention be paid to the composition of the board of governors and the academic senate. These democratic groups are the guarantee of appropriate and legitimate use of public funds because these governance groups understand the complex expectations of the many stakeholders of a post-secondary institution. This structure is also seen as the only fair way to evaluate the complex work of a faculty member (Birgquist & Phillips, 1975). Not surprisingly, this approach is still very popular, particularly among academics (Murphy, 1997). The Canadian Association of University Teachers actively promotes research into democratic governance (Benjamin et al., 1993).

The use of output measures in education reflects the influence of the business community on university governance. Outputs, like profit, are used to determine if internal processes are working properly. The *Report of the Commission of Inquiry on Canadian University Education* by Smith (1991) has become the seminal work about how this approach applies to universities. Smith concluded:

> the real need ... is for measures which indicate how well the university system is meeting the reasonable expectations of its own society and how well a given university is fulfilling its own declared mission. Such measures would permit accountability within the society which is funding the university system, and within each individual university community. (1991, p. 126)

Smith advocated the creation of measures so that the public, students, and academics could see how they were succeeding towards stated goals.

The Smith Commission devoted a large amount of time to considering what kinds of measures capture the reasonable expectations of society. Smith noted, "Each university is a community with its own mission and priorities. The members of each university community must be kept informed of the extent to which they are succeeding in their stated goals" (1991, p. 124). Smith viewed throughput and input performance measures as management tools that universities could adopt as internal controls, but accountability to the community is only achieved through discussion about visible output measures. This approach is consistent with that advocated by Osborne and Gaebler (1993) in *Reinventing Government*. The influence of the Smith Commission acknowledged in AECD policy documents (AECD, 1993), along with Osborne and Gaebler, are a significant influence on the policy direction adopted by AECD (Lisac, 1995).

Policy Implementation

Several dominant models of policy implementation exist. Mazmanian and Sabatier (1981) developed a conceptual model around independent variables such as policy, structure, and tractability, and dependant variables that represented the situation within the implementing agency. Jenkins' (1978) model emphasises circumstances in implementing agencies. Mitnick and Backoff (1984) base their model on agency and communication theory. Goggin (1990) bases his model on communications theory. More recently, Pal (1997) echoes management practice in the Federal Treasury Board (1995) and the Alberta Treasury Department (1994a) by modelling implementation around the selection of a series of management techniques used to hasten progress towards a stated goal or policy direction.

Perhaps the origins of the management control approach to implementation can be traced back to Weber and bureaucratic models (Weber, 1978). The linear and rational breakdown of work tasks is also evident in the scientific management movement, which sought to break work into discrete tasks that could be measured (Taylor, 1967). However, ample evidence also exists to suggest that quantifying all goals is not desirable. Starting with Chandler (1962), management control has focused on interpreting strategy into appropriate structures, and then monitoring the performance that follows. More recently theorists have viewed performance in keeping with strategic policy as a function of organisational design, management rules, policy, and personnel selection (Anthony, 1989; Drucker, 1992; Porter, 1980).

All of the quantitative performance measurement approaches just mentioned focus on measures as feedback. More recently Deming (1986) reinforced the importance of quantitative measures to refine and achieve operational improvements. However, he also suggested that the goals regarding quality and other important aspects of strategy be expressed in qualitative terms. Greer and Carter's (1994) investigation into performance measures provided a current academic justification. He found that performance measures initially stimulate perfunctory compliance, but over time, their use results in criticism, analysis, and refinement that make it possible to refine higher level policy expectations.

Implementation is the process of bringing about change in an organisation. The primary question is what techniques are needed to gain acceptance of selected strategic changes (Baetz & Beamish, 1993). Echoing the public policy theorists, some business writers conclude that implementation is a natural product of planning processes inherent in strategic development (Fry & Killing, 1989). KPIs are appealing, as they specifically set out the changes that are expected. However, it is difficult to predict how KPIs will be interpreted, so the risk of rewarding undesirable outcomes is also increased (Kerr, 1975).

There is a fine line between communication to improve understanding and communication as a source of mastery (Habermas, 1987). The symbolism of a selected communication instrument sets in motion role expectations (Bourdieu, 1991). As a consequence, providing KPIs as part of the policy statement is a significant change. KPIs clarify and simplify the expected outputs by eliminating the traditional discussion surrounding policy directions and managerial compliance. Simultaneously, the ability of managers to use their judgement in the implementation of policy is diminished, creating more incentive for game playing to achieve a visible impact on specified KPIs. The relative merits of these contradictory outcomes that result from the new approach to implementation are the foundation of my research questions. By specifying and funding only certain policy outcomes, are we opening a troublesome "black box" (Winters, 1990) or refining a valuable management technique?

According to Bolman and Deal (1991), "The ebb and flow of power both inside and outside the organisation carries everything else with it" (p. 226). Implementation is about getting governmental departments and agencies to do something new, or different, or both, and in that sense classical studies about organisational power underlie the implementation literature. Frequent references are made to French and Raven (1959), who developed the classic framework for analysis of individual power in an organisation. More recent consideration into how individuals use power to displace organisational goals that conflict with personal, or subunit goals, is also evident in such work as Mintzberg (1983). Even much earlier than these Machiavelli (1983) developed processes to ensure princes' instructions were carried through. More recently, Deming (1986) has gone to great lengths to propose methods to ensure that quality policies are implemented. Implementation is therefore not an automatic outcome of policy development.

The Alberta Government's interest in implementing an accountability policy is consistent with a recurring public policy theme, making it easier to map out this investigation. Concern about implementing accountability policy came to the forefront when Pressman and Wildavsky (1979) published their controversial report about the ways that money from federal public works failed to reach the intended recipients. Since then there has been a growing advocacy for clear measurement (Drucker, 1992; Osborne & Gaebler, 1993). Yet, this demand contrasts sharply with the mounting evidence that rigid planning structures increase gamesmanship and make it more difficult to achieve intended outcomes (Gray, 1997; Mintzberg, 1996).

Within the education community this conflict is even more evident. Donnovan (1996) documented four cases of educational institutions that privatised services that were excluded from their core goals. While Donnovan found some merit in this step, Payne (1996) discovered grave problems with this approach and provides impressive documentation to support his position. Anderson (1985) has also indicated how these accountability processes make lives more complex for faculty members because the actions required to improve indicators of quality and productivity also tend to weaken the processes that support these same outcomes. All of these approaches have to be regarded from a resource allocation perspective–there are many pressures brought to bear on those trying to deal with changes imposed by the accountability policy and the AECD performance measurements. It is not surprising, then, that there are several conceptual approaches to implementation in the literature. The following section contains a summary of selected implementation models.

Dunn

Dunn (1981) approaches implementation as an integral component of policy analysis. First, he discusses the importance of forecasting policy alternatives. In

Dunn's view the policy alternatives for a policy problem are evaluated with an eye to what should be. Forecasting includes setting the policy objectives for a future time frame. Dunn provides a list of techniques for goal setting and predicting outcomes. He pays particular attention to the size of the probabilities for each policy alternative, hence the creation of information about possible future shapes of society. He takes a great deal of care in the selection of alternatives based on six evaluative criteria: objectives, costs, constraints, externalities, time, and uncertainty.

For Dunn the second stage of implementation involves monitoring policy outcomes. He takes a rational approach to policy analysis, suggesting that insight into a policy can be gained by learning from the actions of implementing agencies. He provides a set of procedures for monitoring agency actions, which are relevant to this study. Variations from expected policy impacts are used to improve the policy forecasting and formulation process so the policy and related regulatory framework will more closely match the intended outcomes in the next cycle. Dunn provides a number of useful lists to evaluate policy performance. Dunn, therefore, does not make the distinction between good and bad policy implementation–he considers the process to be one of continuing improvement of the policy formulation.

Van Meter and Van Horne

Van Meter and Van Horne (1975) were important early contributors to implementation theory. They were the first to identify categories of variables that influence the way agents react to policy. With reference to the variables they argued the probability of implementation decreases as the scope of the envisioned change increases. Van Meter and Van Horne were also the first to develop the context of legal statutes and policy documents as an influence on policy implementation. These ideas provided a foundation for research conducted by Jenkins and by Mazmanian and Sabatier and strongly influenced the implementation models they developed.

Jenkins

Jenkins (1978) views implementation as the organisational processes set in motion by a policy. He acknowledges that every policy is rooted in assumptions about political and organisational behaviour and about causal linkages in the social world. This starting point is very different from that of Dunn. Starting with the idea that action is costly in many respects, Jenkins builds on the work of several earlier authors to provide a framework of a theory. Jenkins draws heavily on the Pressman and Wildavsky (1979) account of implementation problems in Oakland. He also applies the Van Meter and Van Horne (1975) conceptual framework to the Oakland situation to provide a critique of current thinking and to justify his own approach.

Van Meter and Van Horne (1975) identified four different implementing agency factors that affect the actual performance of a policy. Jenkins built on this model by showing the circular relationship between communication of policy, agency interests, and the interests of administrators. The goals and concerns of administrators shape their implementation response while also being influenced by the government's goals. From these considerations, Jenkins concluded there are two theoretical considerations at stake. First, he concludes that policy implementation is only possible if political and administrative constraints are considered in the selection of policy alternatives. Second, he endorses a careful evaluation of the programmes and projects adopted by implementing agencies in response to a policy. He justifies these two considerations in the joint responsibility of policy administrators to bring about changes and to control the policy effects. Jenkins views the implementation process as organisational development for implementing agencies and creating policy information for future policy decision making.

Goggin

Starting with a similar focus on the actors in implementing agencies, Goggin (1990) developed a "dynamic" model of implementation in which he paid more attention to communication theory than did the authors of earlier conceptual models. He identifies three implementation components: inducements and constraints from the policy makers, inducements and constraints offered by the implementing agencies, and the capacities of the implementing agencies. He places the implementing agency in a pivotal role in terms of capacity and the context in which messages are sent out. Goggin integrates feedback into the model as a mechanism for policy revision about the offered inducements and constraints.

Mazmanian and Sabatier

Mazmanian and Sabatier (1981) produced the first book devoted exclusively to policy implementation. They developed an implementation model out of a set of six case studies reflecting different situations. As a starting point, they divided the factors involved in implementation into independent and dependant variables. The independent variables are factors external to the implementing agency. These variables include structural power through mechanisms like funding, attitude of related parties to the policy, and tractability. Tractability means the amount of change needed in relation to available technology and affected groups. Mazmanian and Sabatier identify the dependent variables as those factors related to the implementing agency. Agencies recognise the difference between compliance with policy and compliance with policy outputs. They also distinguish between perceived and actual impact.

According to the Mazmanian and Sabatier recommendations, implementation studies should approach independent and dependent variables as related yet separate steps in the implementation process. This approach allows the researcher the opportunity to distinguish between those situations of unsuccessful implementation that are the result of poor effort by the agencies from those of good effort but poor possibilities for success because of the dependent variables.

Mitnick and Backoff

Mitnick and Backoff (1984) designed a conceptual model of implementation using agency theory. The primary question addressed by agency theory is whether those associated with an organisation agree about how it should be managed (Barney and Hesterly, 1994). It is assumed that everyone associated with an organisation is boundedly rational, self-interested, and prone to behave opportunistically. When the interests of organisational agents converge with the interests of the organisation, things are fine. Because the agents' choices affect the principal's welfare, accountability and the risk attitudes of the principal and the agents become very important. When the interests of the principal and the agents diverge, it is costly for the principal to monitor the agents' actions perfectly. When the principal cannot perfectly and costlessly monitor and acquire the agents' information, it is possible for the agents to take advantage of this opportunity by working against the interest of the principal (Eisenhardt, 1989).

Using agency theory and a transactional approach, Mitnick and Backoff (1984) were able to develop a well-regarded framework for implementation studies. They used agency theory to justify an analysis of incentive systems to explain the behaviour of organisations and players in the organisations. They argue there is so much ambiguity and variety in organisational goals that only through implicit rewards are important relationship and linkages established. This means the principal must find specific ways to align the agents' pursuit of self-interest with the organisation's goals. In sharp contrast with the approach of Mazmanian and Sabatier, this approach encourages the analysis of specific variables in a situation as a unique system, rather than the development of a universal model for all implementation situations.

Pal

Pal (1997), a Canadian, is developing implementation models for the current and local political environment in Canada. Pal notes the extreme pressure for visible success is an important feature of current implementation developments. She identifies forward mapping as an important aspect of policy implementation in this era of new public management. Forward mapping suggests that once the government has set a particular policy in place, implementing agencies such as AECD, university boards, and academic departments, are in the best position to provide flexible and responsive service to the intended groups. As a consequence, each layer elaborates what the policy means. Pal's work draws heavily on the work of Mazmanian and Sabatier (1981), particularly by elaborating implementation as a political process of bargaining among actors who, while not necessarily equal in resources, can each affect outcomes. Pal focuses on the implementation chain as a key variable in implementation and recommends the use of multiple approaches (lenses) to analyse the situation of each player to understand the shape of policy that emerges at the end of the policy chain.

O'Toole

O'Toole (1986) reviewed 95 implementation cases and recommended the implementation models presented here, (except for that of Pal, 1997), for further research. Pal's work was published after O'Toole. The variations between the reviewed models can be understood in light of Bourdieu's argument that research objects and the methods of control are closely linked. A great deal of care is required when selecting an object because it is then the basis for constructing social reality

(Bourdieu, 1991). For these reasons, which are further elaborated in chapter 3, I have selected the Mazmanian and Sabatier (1981) model for this study.

Policy has a major impact on implementing agencies and must be an important consideration in their planning. Jenkins (1978) explicitly noted the motivation effect on agencies when the way to win more resources is clear in the policy approach. Oakes, Townley, and Cooper (1998) were able to identify the importance of business planning in Alberta in changing the symbolic, cultural, political, and economic capital within cultural museums facing the same accountability policy that I am studying in an education context. As a result, the role of business plans and planning processes are an important control link (Porter, 1980) and influence the implementation process.

Change and Management Control Impacts

The accountability policy and implementation steps taken by AECD change the environment in which post-secondary institutions operate. This change makes an impact on institutional outputs and processes. Management literature rarely uses the term *implementation*, preferring instead the term *management control*, which means ensuring that policy directions are carried out. Resistance to changes necessitated by a new policy direction are typically classified by the nature of the change required, for example, adaptive, innovative, or revolutionary shifts in operations (Nutt, 1987). As the amount and complexity of the changes increase, so, too, does the potential resistance. There is an abundance of literature about policy change and the impact on organisations.

Porter (1980), repeating widely supported assertions, believes that the business plan is the most powerful and significant force behind the process of management control and change. The business plan is a policy statement that directs administrators to select the techniques required to facilitate the compliance of all the players with the desired direction (Baetz & Beamish, 1993). Some business writers go even further, suggesting that implementation is a natural development flowing from the strategic development process (Fry & Killing, 1989). None of the policy authors I have reviewed advocate the use of a rigid system of performance measures to implement policy. This conclusion was confirmed by the work of Nanni, Gregory, and Platts (1995). They found that performance measures have an implied dual purpose: monitoring the past and stimulating future action. In their study they found little has been done to identify and develop truly predictive performance indicators. This research supports the use of self-measurement, not as an engineered control mechanism to ensure the implementation of the business plan, but for motivation and learning.

The balanced scorecard concept, developed by Kaplan and Norton (1992), is a significant management control development. Kaplan and Norton started from the premise that "What you measure is what you get" (p. 71), and so performance measures should be closely aligned with the business vision and plan. Working from the metaphor of an airline pilot, they then developed four categories of measures, or instruments, needed to guide an organisation. They argue that the obvious folly of a pilot relying on only one type of instrument also applies to administrators. Referring to 12 case studies, they proposed a "balanced scorecard" consisting of goals and measures that covered four different organisational perspectives: financial, customer, internal business, and innovation and learning. The approach was quickly and widely adopted as an innovative improvement to the feedback available from traditional management control systems. In Kaplan and Norton's words, the balanced scorecard

> ...is well suited to the kind of organisation companies want to become. The scorecard puts strategy and vision, not control at the centre. It establishes goals but assumes that people will adopt whatever behaviours and take whatever actions are necessary to arrive at those goals. (p. 79)

Kaplan and Norton's (1996) most recent refinement of the balanced scorecard concept reflects the subtle change in the use of KPIs that I am investigating. Their initial work focused on a metaphor—the balanced mix of information that a pilot requires to maintain a smooth flight. Their 1996 book *The Balanced Scorecard: Translating Strategy into Action* changes the focus of this metaphor. The authors now suggest that the scorecard be used to guide and inform the strategic formulation process. In addition to informing the pilot about how the trip is going, they also advocate measures to indicate to the pilot how the flight is to be conducted.

Kaplan and Norton acknowledge in their 1996 work the dangers of opportunistic behaviour arising from the addition of measures to guide the pilot. They explain how the dangers of this change can be contained or mitigated. This acknowledgement is significant because the dangers were not evident in the first version of the scorecard.

This addition might be a reasonable articulation of the steps needed to integrate strategic and control processes. It might also be an early indication that suggested transformation of a valuable feedback technique is not appropriate. The balanced feedback has encouraged creativity, increased motivation, and produced a body of work on anecdotal success stories. The 1996 proposals to include balanced mapping out of the journey have not yet produced the same glowing reports of success.

It is not surprising, given the contradictory approaches already introduced, that a contingency approach to managing change has developed along two lines. One approach has been to profile the dynamics of the situation to develop strategies for change. Typical of this line of thought are Kotter and Schlesinger (1979), who recommend stronger implementation measures in proportion to the significance of the needed change. The other approach is to classify strategies for change. Typical of this thinking are Ivancevich and Matteson (1990), who refer to the manager's skills and argue that natural models of implementation will emerge out of the situation. They created six categories of change strategies suitable for different classifications of situations. All of these approaches are consistent with the policy analyst's view that implementation grows out of the formation process (Dunn, 1981).

A different approach to change management, which is more consistent with the social engineering ideals advocated by Dror (1987) and Brook (1989), is the approach first taken by Lewin (1951). Lewin postulated the need for three steps: unfreezing, transforming, and refreezing. Schien further refined this approach in 1985. The first step involves making it desirable to learn new responses to organisational needs. Information that supports existing approaches is cut off, and new information, supporting different approaches to work, is introduced. Once the organisation is unfrozen, new beliefs, values, and patterns can develop. This is a time when new information is integrated into a new set of administrative perceptions. Once the new beliefs and attitudes are formed, a careful process of stabilising and integration is required. It can take some time for a new model to become imbedded in all of an organisation's systems and to take root in an organisation's culture. The Lewin approach has been widely adopted by professionals who are responsible for setting organisational direction, such as the Society of Management Accountants of Canada.

One model used to design the steps taken in a change management programme is Vroom's (1964) expectancy theory. Vroom contends that the valence, instrumentality, and expectancy of the individuals involved affect their response to a new policy. Valence is the satisfaction derived from a particular outcome. The use of KPIs provides a public opportunity to show competitiveness and to be rewarded with money and students. Instrumentality is the connection between the behaviour and a desired outcome. KPIs establish direct funding links to performance. Finally, expectancy is the belief that actions controlled by the individual can influence the outcomes. So, with reference to tractability, expectancy theory offers concrete ways of examining the situation to understand the implementation activities undertaken by implementation agencies.

Designing a change management strategy is complex and failure is possible. Indeed, Mintzberg (1983) found that many policy shifts are not implemented. He found that steady states exist for long periods of time until the pressures against outdated policies grow so large that systemic changes are brought about. Steady and consistent operations can be efficient and comfortable, so there are tremendous forces against change. Evident in all of the Government of Alberta accountability documents is a tremendous faith in the government's ability to break policy down into logical and measurable indicators. This perspective is consistent with a modern belief in rationalism (Habermas, 1987). The literature reflects both the desires for a rational approach and the countervailing complexities of social processes.

Impact on Institutions

Post-secondary institutions are agents of the Government of Alberta in the delivery of post-secondary programs and in conducting research. KPI usage has a different impact on agents than it does on other types of organisational structures, for example, the impact on universities would be different if they were departments of the government. Boyne and Law (1991) discovered that shifts of responsibility for service delivery to municipal authorities increased the attention and responsiveness to accountability measurements. Hyndman (1990) found similar results in his study of charities. These recent studies confirmed the earlier findings of Brace, Elkin, Robinson, and Steinburg (1980) that agencies report more performance measures than all other types of not-for-profit organisations, and are consequently paying more attention to accountability concerns. Because there is an established reason to believe that KPIs have an impact on agencies, and post-secondary institutions are to some extent agencies, some of the literature about the impact on institutions is included here.

Measurement structures convey important messages in an organisation. They are indicators of deeper social structures and arrangements. According to Bourdieu (1993), the agreed structure of capital in a society arises from a complex set of often implicit agreements and myths. Management structures are one manifestation of these structures. It is therefore recognised in the accounting literature that once measurement, and particularly accounting mechanisms, builds around a particular construct, it is difficult for agencies to see beyond that (Belkaoui, 1989). In other words, the opportunity to create slack and the field for budgetary games is defined by the selected measurements. In this context, one impact of a new policy is the efforts to preserve the status quo while visibly supporting the new direction (DiMaggio & Powell, 1991). Accounting structures are rooted in ideology, so lasting change will only occur if the implementation techniques go beyond surface structures (Roselander, 1992).

At first glance the KPI approach is a promising way to motivate change in the underlying structures. However, Kerr (1975) raises questions about our ability to predict the impact of performance measures on organisations. Covin and Kilman (1990) develop this idea further by examining the role of participant reactions to large-scale changes, include major policy shifts. They discovered that even with straightforward changes, perceptions of a large-scale change vary greatly, even among close colleagues. The degree of negative and positive perceptions influences greatly the degree of support or defensive action taken regarding any change. Even with models such as Vroom's (1964) to help manage the change process, the energy required to achieve a common and positive response is enormous.

Despite the difficulties, interest in measurement persists because measurement is perceived to be a rational way to demonstrate the need for change and action. Dror (1987) made a clear argument for this perception, noting that well-documented deficits of any kind are needed to elevate the level of instability to engender real responses. Dror's argument is consistent with unfreezing strategies advocated by

Schien. However, Epstein (1983) noted that this strategy has backfired with prolonged use because the impact wears off with time. What emerges from these arguments is the case for organisational development. Steinburg (1992) concluded that change processes create positive effects if the organisation learns about itself and the environment–otherwise immunity to the measurements will develop.

The concerns about achieving desired impacts from organisational change can also be found in the strategic formulation literature. Elaborate management control systems are meant to ensure that selected directions are implemented (Anthony, Dearden, & Govindarajan, 1992). Perhaps the origins of the management control approach to implementation can be traced back to Weber and bureaucratic models (Weber, 1978). In the Weber tradition, exact procedures are set up and tasks are divided into units, making it easier to monitor progress towards goals. This is not unlike the efforts of the scientific management movement, when it sought to break work into discrete, measurable tasks. At its extreme this effort included specific performance standards being included in the description of the task (Taylor, 1967). However, all of this effort is directed at operational level tasks.

It is tempting to generalise the many management control techniques that quantify aspects of strategy, such as total quality management, management by objectives, activity based management, and benchmarking into the notion that overall goals and strategies can be completely quantified. Starting with Chandler (1962), management control has focused on interpreting strategy into appropriate structures and then monitoring the performance that follows. More recently, theorists such as Anthony (1989) have viewed performance in keeping with strategic policy as a function of organisational design, management rules policy, and personnel selection. They advocate using performance measures as feedback to refine and suggest operational improvements. The increasing emphasis on the power of the mind rather than on labour makes this particularly important (Alvesson and Deets, 1996).

Organisational power is relevant to the politics of implementing a change in policy. French and Raven (1959) developed the classic framework for analysis of individual power in an organisation. More recent consideration has been given to how individuals use power to displace organisational goals that conflict with personal, or sub-unit goals. Mintzberg (1983) concluded that whoever has power in an organisation determines whether real or only optical implementation occurs. Introducing new policy affects the distribution of power in an organisation, thereby becoming a focus and source of many changes (Bolman & Deal, 1991). Therefore, the impact on organisational outcomes of a new policy is greatly influenced by the political environment in an organisation.

One effect that KPIs have on the political environment in an organisation is to reduce power distance. Power distance is differences in the amount of control that can be exercised by members of an organisation (Ng, 1980). KPIs reveal the policy intentions of government and AECD in a very public way. Control over post-secondary institutions is never complete because they are agents of the government. However power does not have to be exercised to be real (Clegg, 1989). KPIs are a reminder the government see post-secondary institutions as strategic agencies. As the KPIs become well known, the intentions of the government will become well know to everyone in these agencies. The result will be as shorting of the power differences within post-secondary institutions and a great degree of strategic obedience (Clegg, 1989).

Another expected effect of KPIs is a shift performance evaluation towards outcomes and short-term results, thereby affecting power relationships. Indeed, Maskell (1996), in his book *Making Numbers Work*, notes that immediate and continuous feedback is the essential feature of KPIs. Maskell asserts that KPIs focus the administrator on the design behind the performance area, and he does not consider that KPIs also cause the administrator to focus on the calculation of the KPI. Dolence and Norris (1994) considered this point in the context of post-secondary education. They noticed the ability, in the short term, for administrators to undertake actions that would improve the next quarter, but that significant difficulties arose over the longer term. Short term considerations are also a factor in the corporate sector. The nature of universities makes the emphasis on the short term very important as it takes a very long time before the impact, in terms of outcomes, of any policy changes can be detected.

Accountability

Accountability is more than a policy adopted by the Government of Alberta. Consideration of the broader social context of accountability places Alberta's policy and related initiatives in a more meaningful perspective. In an attempt to summarise the meaning of the term *accountability* from the current literature, Patton (1992) observed:

> In most settings one party (individual, group, company, government, organisation, etc.) is said to be directly or indirectly "accountable" to another party for something, action process or outcome. ...However, the precise meaning and implication of the concept of accountability are often left unclear. (p. 166)

An important reason for the lack of precision is the controversy that erupts when stakeholders are asked to agree on specific responsibilities (Dennison, 1998). Given the variety of stakeholders in the post-secondary system, consideration of relevant post-secondary accountability literature is important.

Accountability is the process through which two parties communicate about how they have carried out their responsibilities towards each other (Lerner, Goldberg, & Tetlock, 1998). Annual reports and financial statements are vehicles through which management is held accountable for the stewardship of shareholder capital. The Government Accounting Standards Board (GASB) has asserted the public sector will demonstrate accountability by:

> being obliged to explain one's actions, to justify what has been done... accountability requires governments to answer to the citizenry–to justify the raising of public resources and the purposes for which they are used. (GASB, 1987, p. 21)

The Government of Alberta was more specific in its definition of accountability following the 1993 election. According to the Auditor General:

> Accountability is an obligation to answer for the execution of one's assigned responsibilities....The basic ingredients of successful accountability relationships are as follows: set measurable goals and responsibilities, plan what needs to be done to achieve goals, do the work and monitor progress, report the results, evaluate results and provide feedback. (Alberta Auditor General, 1994, p. 1)

These definitions illustrate the general components of the communication that is needed to demonstrate accountability.

Concerns about authoritarianism and inappropriate attributions of responsibility arise from the common definitions of accountability (Lerner, Goldberg, & Tetlock, 1998). Lang, as Registrar of the University of Toronto, picks up on this during his address to the Measuring Up conference in 1994. He indicated that specific measures and goals could not replace the role of peer assessment and effective boards as the principal instruments of accountability (Lang, 1994). According to Peters, once government, as the principal in the post-secondary system, decides to use specific measures to clarify accountability expectations, power has been appropriated from the universities (Peters, 1992). This effect then diminishes the independence that the universities need to perform their role as educational agents of the government. With governments experiencing strong budgetary limitations, societal and governmental expectations of university performance do not necessarily coincide (Dennison, 1998). It is important to keep in mind, therefore, that the government has a privileged position when it comes to setting up accountability systems for universities.

Even though government funding of post-secondary education is declining, grants from governments still represent the largest individual source of finances for public universities and colleges in Alberta and Canada. Being accountable to the general public for these funds is important to governments. In the introduction to the post-secondary accountability project in British Columbia, Schlatter expressed this concern as follows:

> An appropriate accountability system is critical. The proposed accountability system would be characterised by a framework of joint strategic planning, budgeting, and goal setting internal monitoring by universities and external reporting on achievements. ... The accountability system would foster an environment in which universities could excel as vibrant, autonomous institutions. (Schlatter, 1992, p. 2)

Underlying this policy assertion is the idea that government and the university reach a common understanding about the goals of the university. However, there is a growing frustration between the two as governments look to universities and colleges as agents of socio-economic change, and educational institutions do not regard this role as their primary mandate (Dennison, 1998). When there is a gap between the expectations of the two parties, it will be hard to agree on a system of measurements. The lack of agreement will increase the temptation for governments to impose measurements to meet their own accountability requirements.

An alternate view of accountability proposed for post-secondary education is that to be accountable a program must adequately meet a minimum set of goals and standards (Conrad & Blackburn, 1985). In this view the full set of stakeholders are taken into account. The difficulty, then, is in setting specific measures to monitor progress to resolve the overlapping and perhaps conflicting goals of the stakeholders (Elton, 1998). In this view of accountability, the government is only one of many stakeholders with an interest in university accountability. Each stakeholder then becomes a principal in the agency relationship. How the differences in expectations are reconciled is not often clarified in the literature. To report on the accountability of AECD to the government requires different considerations than to report on the accountability of a university to AECD. Universities directly serve a greater variety of stakeholders who are simultaneously involved in the daily operations of the university.

Universities have many stakeholders. Dennison (1998) summarised them as belonging to one of six groups: students, staff, employers, transfer institutions, local community, and government. Each group demands different services, performance, and outcomes, so accountability means something different for each. Tremendous leadership abilities are required to gain the common understanding of assigned and determined organisational goals that Elton (1998) found necessary for successful accountability reporting. This leadership challenge was used by Conrad and Blackburn's (1985) as justification of a minimum acceptability standard to define accountability. Multiple accountability reports from different sets of performance measures are needed to achieve accountability. On the basis of this requirement, Dennison (1998) concluded that accountability is an impossible mission until there is a meeting of all the minds about the primary purposes of colleges and universities.

Lerner and Tetlock (1999) investigated accountability systems for characteristics of the principal audience. They learned that if the audience's views—in our case the Government—are known, then creativity will be stifled. The agent has no choice but to match or restructure tasks to demonstrate compliance through whatever measures are used. All the power in this relationship shifts to the principal. If the principal's views are not known, then the accountability interest shifts to the agent. In this case, accountability reports are used as defensive weapons against criticism by clearly defining the goals. The agent feels free try creative approaches because the actions are justified by the accountability criteria the agent has presented. Lerner and Tetlock concluded that the use of specific performance measures—which by their nature serve to clarify the audience's views—will have a strong impact on the way the agent approaches the accountability process.

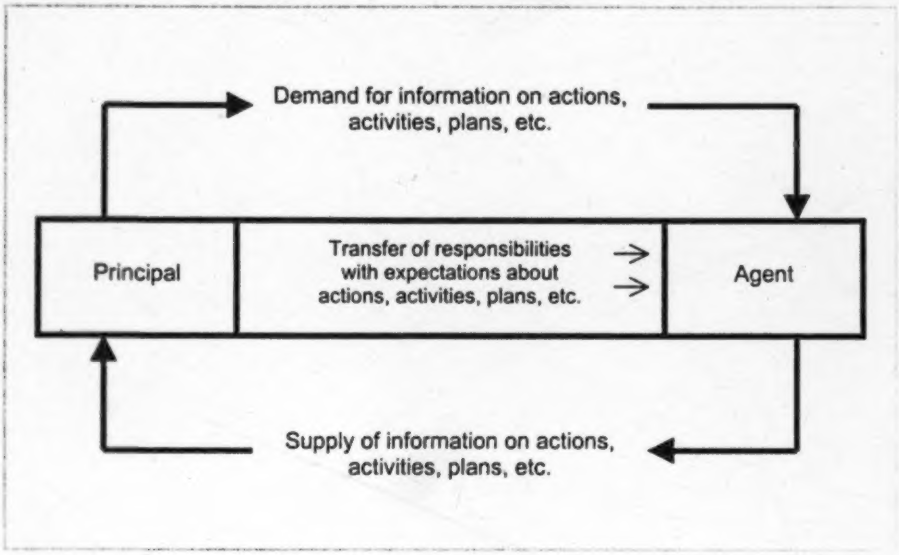
Demand for information on actions, activities, plans, etc.
Principal
Transfer of responsibilities with expectations about actions, activities, plans, etc.
Agent
Supply of information on actions, activities, plans, etc.

Figure 2.1. Accountability Relationships (Laughlin, 1990, p.97)

All of the literature in the preceding section is consistent with the conceptual framework proposed by Laughlin (1990) for accountability relationships. His model grew out of research into the accountability relationships between the different levels within the Church of England. The agency relationship between the principal and the agent is mapped out in the middle of Figure 2.1. Along with the transfer of responsibilities are the related demands for information, as depicted along the top of the figure. The agent, in addition to responding to the transfer of responsibility, will supply to the principal a flow of information, as depicted along the bottom of the figure. Specific accountability mechanisms will grow out of the relationship about the transferred responsibilities as demands and responses accumulate in the flow of information.

The Laughlin model and the literature presented in this chapter have been used to develop a conceptual diagram for this study.

Conceptual Framework

Figure 2.2 is a preliminary conceptual diagram of the role of KPIs in the policy development and implementation processes covered in this literature review.

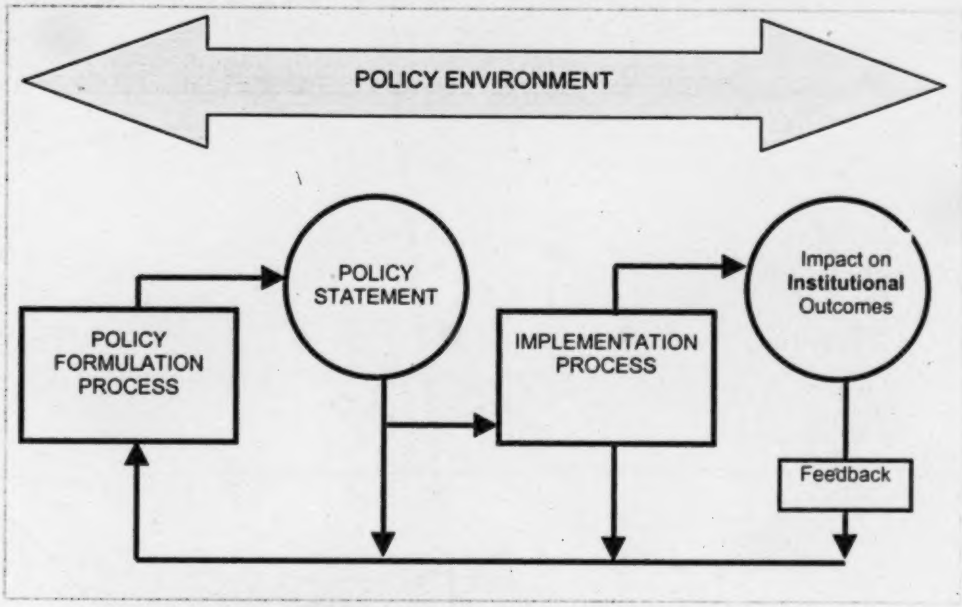
POLICY ENVIRONMENT
POLICY STATEMENT
POLICY FORMULATION PROCESS
IMPLEMENTATION PROCESS
Impact on Institutional Outcomes
Feedback

Figure 2.2. Use of KPIs in the Policy Cycle

This literature review has provided background and focus for an investigation into the use of KPIs as a policy implementation tool. Oakes, Townley, and Cooper (1998) demonstrated that the accountability policy has enough depth to support research into important questions, such as the tension between rational policy development and the need for communication to establish learning. The formulation and development of the accountability policy and related initiatives provide a basis from which to consider the impacts of KPIs on organisations. Obviously, post-secondary institutions are hard to manage because they are composed of several fairly autonomous groups, they are more like a clan (Ouchi, 1979) than a military unit. As stated by Evans (1997) when examining the implementation of the same accountability policy by Alberta Education, the structures selected influence the entire management process.

Policy development and implementation are an ongoing collective response to the environment in which we find ourselves. Policy formulation, as described in this literature review, is sensitive to organisational outcomes, is shaped by the governance models, and is always in the context of the policy environment. Policy statements, therefore, communicate significant information about the policy process and what is expected from implementing agencies. Policy information is interpreted in the light of the policy environment, by implementing agencies, and making an impact on their institutional outcomes. The outcomes, in turn, influence the policy formulation process and the policy environment, thereby starting another cycle. Each research question is directed at an aspect of this cycle. The conceptual diagram reflects the traditional use of KPIs as a feedback tool in the planning cycle.

This study followed the Alberta Government's accountability policy through the cycle, and specifically focused on the KPI project within AECD. As a result, I will be contributing to the limited number of implementation cases available for analysis and will be able to offer findings about the potential of KPIs as an implementation tool.

Summary

Chapter two provided a review of six categories of literature related to the purpose of this study in order to link this study to related research. Research regarding policy context, accountability policy, policy implementation, change and management control impacts, and accountability was discussed. The reviewed literature was used to develop a conceptual framework for the study concerning the use of KPIs as an implementation technique in the policy cycle.

Chapter Three

Method of Research

This chapter outlines the processes used to conduct this study and is divided into three sections. In the first section there is a description of the design and case study method used for this study. The second section describes the process of data collection and analysis. Actions taken to ensure the quality and ethical standards of the study are described in the third section. Throughout the chapter, references are made to the methodological sources used to assess the credibility of the decisions I made during this study.

Research Design

My ideology and the structure of the research problem influenced which research method I selected. Governments, organisations, agencies, and performance measures may be institutionalised, but they are still socially defined constructs. In chapter 2 I reviewed several significant policy implementation models: Dunn (1981), Jenkins (1978), Van Meter and Van Horne (1975), Mazmanian and Sabatier (1981), Mitnick and Backoff (1984), Goggin (1990), and Pal (1997). Whereas policy models reflect various ideologies, there is an epistemological consistency among all of these implementation models. This consistency, which I explain in the following passages, led to my selection of the case method for this research study.

Research Paradigm

Burrell and Morgan provide a framework that can be used to classify social research projects:

> Social theory can usefully be conceived in terms of four key paradigms based upon different sets of metatheoretical assumptions about the nature of social science and the nature of society. The four paradigms are founded upon mutually exclusive views of the social world ... With regard to the study of organisations, for example, each paradigm generates theories and perspectives which are in fundamental opposition to those generated in other paradigms. (Burrell & Morgan, 1979, p. viii)

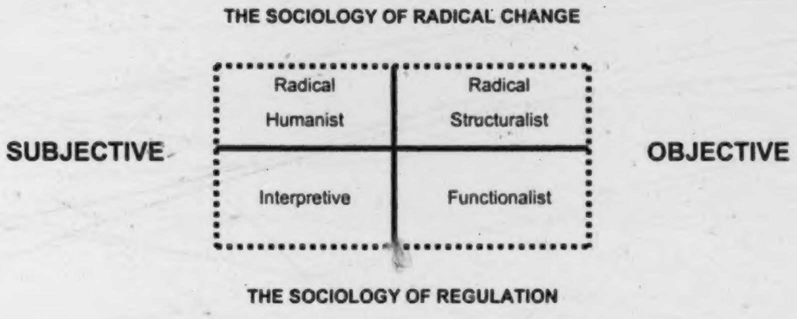

Figure 3.1. Four paradigms for the analysis of social theory (Burrell & Morgan, 1979, p. 22).

The policy implementation literature and my research problem fall into the interpretive camp according to the Burrell and Morgan framework. Administrators in post-secondary institutions are unlikely to be interested in radical change. Concern for their career and institutional stability supports a regulatory perspective. Implementation literature emphasises social processes. My problem statement also emphasises how new social understandings are developed between the government, department, and institutions. A full range of complex legal and interpersonal relationships is involved. These factors are indicative of a subjectivist rather than an objectivist viewpoint.

I also examined my underlying ideology by considering the role of political ideology in policy implementation studies. Policy implementation is the process of bringing about change within society through public policy mechanisms. Public policy models reflect the full variety of perspectives suggested by Burrell and Morgan (1979). What we refer to as implementation models take for granted the role and responsibility of government to regulate the shape of society and social behaviour. Although elements of individual choice are acknowledged in all of the models, the policy implementation field is built on a classical conservative ideology (Marchak, 1988). The most recent implementation approaches discussed by Pal (1997), and Goggin (1990) still use the notion of a leadership elite that bounds individual market and property rights to protect collective interests, despite the classical liberal tendencies of the new public management model. The models of policy development and implementation make little sense outside of this ideological frame.

Case Method

The case study is commonly used to investigate implementation in complex situations. This pattern began with the Pressman and Wildavsky (1979) investigation into the failure of a new federal housing policy to make an impact on conditions at the end of the implementation chain. Federal policy and money was passed down, eventually reaching the local Oakland California housing authority, but conditions did not improve. Since Pressman and Wildavsky, the case method has dominated policy implementation studies (O'Toole, 1986). The modern use of the cases follows the pattern of case methodology in traditional philosophy and social research. It also commonly employed in professional schools because it is a highly effective method of capturing important human experiences. Although knowledge may be separated from experience, understanding is best achieved when the two are linked.

The case method helps us preserve a situation so that the researcher and subsequently others can test multiple theories and interpretations. Yin (1994) built on that argument to justify the case method:

> The distinctive need for case studies arises out of the desire to understand complex social phenomena. In brief, the case study allows an investigation to retain the holistic and meaningful characteristics of real life events—such as individual life cycles, organisational and managerial processes, neighbourhood change, international relations and the maturation of industries. (Yin, 1984, p. 14)

Given the relatively short history of implementation studies, O'Toole (1986) also suggested that the case study should be the investigative method used for policy implementation studies to support comprehensive theory development.

Pursuing all of the ongoing connections related to a case study inevitably leads to an unmanageably large project. To limit the research to a manageable size and to focus on the specific research questions, the research unit was carefully defined (Platt, 1992). My purpose was to explore the policy inputs, outputs, and perceptions of the implementing agencies to gain insight into the use of KPIs. This places the focus on factors influencing the decision makers (elites) in AECD and institutions.

Sabatier (1986) includes consideration of the values of the elite in his framework for policy implementation. Benveniste (1989) supported this view by discussing the strength of incentives to take care of self-interest in addition to those of the organisation. The web of interests arising from the accountability policy is impossibly large. In this study I limited the research to government policy, AECD, and institutional responses. I also limited the time period under consideration, thereby limiting the research unit to a manageable size.

Design of the Study

Research design creates a means for the exploration of the research questions. I made use of Yin's (1994) detailed set of guidelines for the design of a case project. Yin divides the overall design consideration into four major sections: design, data collection, data analysis, and composition of the report. The following sections describe the research design that I used in this study by applying Yin's guidelines with reference to other appropriate sources.

Yin (1994) uses Wilford's (1992) case study of Columbus's expedition to America to demonstrate how valuable an initial model is to case research. In the same way that Columbus used a model of the world to shape his expedition plans, I have selected the Sabatier and Mazmanian implementation model as the most promising for research into the implementation of the government's accountability policy and the use of KPIs. Sabatier (1986) divides the process of implementation into three components: tractability, ability of the state to structure the problem, and nonstatutory variables. The Mazmanian and Sabatier model incorporates the scope of the environment that I investigated: organisational impacts and policy processes. Use of this model provided boundaries and organisation to the conceptual framework presented at the end of chapter 2. First, the model stresses a clear understanding of the beliefs of the policy elite. The second emphasis is the top–down policy and programme efficiency. AECD and faculty units are two organisations in the accountability chain and are therefore valid units in which to consider these questions.

Prior to 1981, Mazmanian and Sabatier focused on developing case studies. They had noticed the lack of research concerning policy and legislation enactment and the resulting impacts. Over time, they reduced the research gap with a number of case studies. The cases were then used to identify recurring implementation variables. Instead of focusing on specific variables, Mazmanian and Sabatier were able to classify the variables in conceptual terms. This was a significant achievement compared with other studies (O'Toole, 1986). A diagramatic summary of their framework is presented in Figure 3.2.

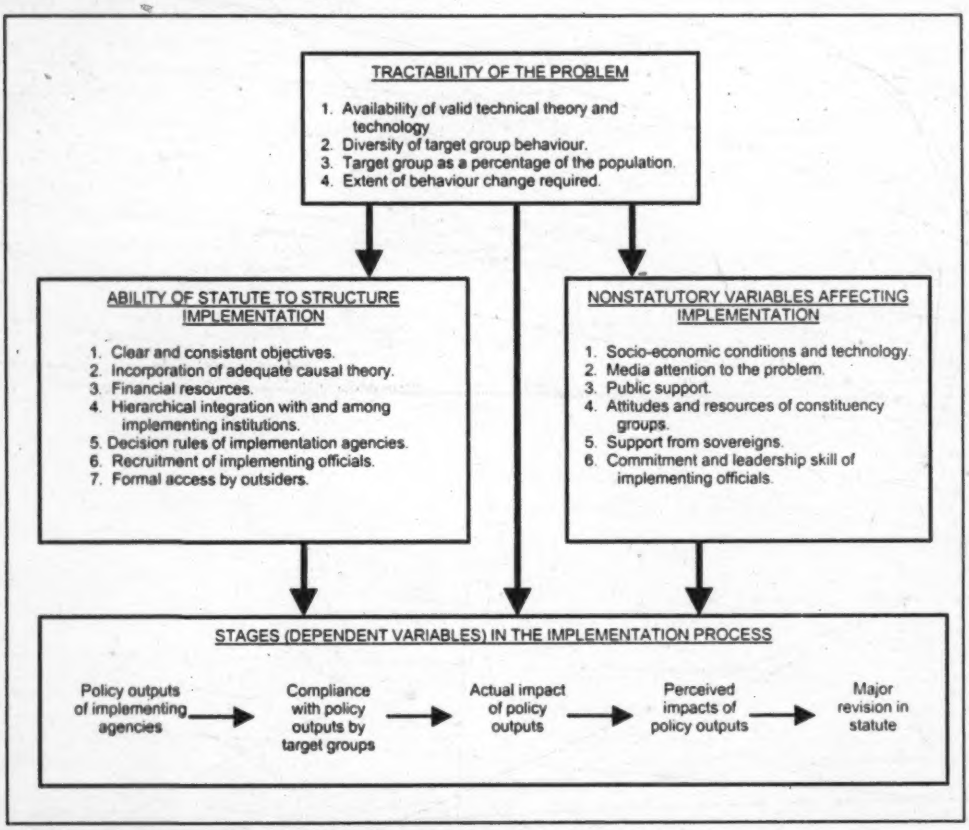
TRACTABILITY OF THE PROBLEM
1. Availability of valid technical theory and technology
2. Diversity of target group behaviour.
3. Target group as a percentage of the population.
4. Extent of behaviour change required.
ABILITY OF STATUTE TO STRUCTURE IMPLEMENTATION
1. Clear and consistent objectives.
2. Incorporation of adequate causal theory.
3. Financial resources.
4. Hierarchical integration with and among implementing institutions.
5. Decision rules of implementation agencies.
6. Recruitment of implementing officials.
7. Formal access by outsiders.
NONSTATUTORY VARIABLES AFFECTING IMPLEMENTATION
1. Socio-economic conditions and technology.
2. Media attention to the problem.
3. Public support.
4. Attitudes and resources of constituency groups.
5. Support from sovereigns.
6. Commitment and leadership skill of implementing officials.
STAGES (DEPENDENT VARIABLES) IN THE IMPLEMENTATION PROCESS
Policy outputs of implementing agencies
Compliance with policy outputs by target groups
Actual impact of policy outputs
Perceived impacts of policy outputs
Major revision in statute

Figure 3.2. Skeletal flow diagram of the variables involved in the implementation process (modified from Mazmanian & Sabatier, 1981, p .7).

Mazmanian and Sabatier (1981) identify three sets of independent variables that make an impact on the implementation steps. The first of these is labelled tractability, which refers to the nature of the policy problem. For example, the presence of valid theory and the extent of behaviour change required will affect the possibility of successful implementation. The second variable is the ability of the policy maker to constrain the implementation process. The clarity of policy objectives, the decision processes of implementing agencies, and the financial arrangements and resources affect the assignments of rights and responsibilities of the actors involved. The new use of KPIs that I am investigating potentially increases the constraints that a policy maker can impose on the implementation process. The third variable is nonstatutory factors, which include the circumstances of those involved in the policy problem. Personal and organisational circumstances and self-interest affect the degree of attention that is paid to a new policy.

Every independent variable has a specific impact on each stage of the implementation process. Mazmanian and Sabatier identify five distinct implementation stages. During the first stage, new policy outputs are created by implementing agencies. This step will then trigger a degree of compliance by all of the agencies in the implementation chain. A significant feature of the Mazmanian and Sabatier model is the distinction made between the actual and perceived impacts of the policy inputs. The impact on implementing agencies and clients may be different than the principal perceives. Because the principal controls the policy documents, the model provides for the possibility of policy revisions that do not make sense in terms of the actual policy impacts. The model captures a circular implementation process and the differences between dependent and independent variables.

Each of the implementation distinctions presented in the Mazmanian and Sabatier model prompted more rigorous development of my case study. The importance placed on the distinction between planned and actual impacts prompted questions that resulted in many useful discoveries about the development of the KPI project that were not initially obvious. The model provides a technical way to classify implementation shortcomings. Shortcomings that result from weak independent variables are different than shortcomings because of managerial weakness. Consideration of the relative importance of the variables in this case study strengthens the value of my observations about the effectiveness of KPIs in the implementation process.

Another important question addressed by the model is when implementation occurs. The approval of a policy or passage of legislation does not mean anything has happened. However, an eventual and consistent realisation of the intended policy impact is also not realistic. Mazmanian and Sabatier demonstrate how policy design and implementation are interactive processes. Ongoing policy adjustment occurs in reaction to the impacts and perceptions that emerge throughout implementation. In this regard, policy implementation must be a continual process throughout the life of any policy.

The Mazmanian and Sabatier model is a top–down model of policy implementation. Despite the populist leanings of the present Alberta government, the accountability policy has been applied in a top–down manner. Levitt (1980) detailed common concerns arising from an investigation of top–down systems. He splits the implementation responses into three levels: technical, administrative, and interorganisational. These levels make the process more three-dimensional, so that the rich social complexity faced by implementing agencies is more accessible. By asking questions about policy implementation from technical, administrative, and interorganisational perspectives, I obtained a richer understanding of how things have transpired.

Yin also makes it clear that the selection of an analytical approach is an integral step in the research process. In keeping with the arguments that I made in chapter 1 about the complex and collective nature of policy development and implementation, I searched for an approach that would provide several views of the research data. Bolman and Deal consider multiple approaches necessary as well:

> Too often they *(leaders)* bring too few ideas to the challenges that they face. They live in psychic prisons because they cannot look at old problems in new light and attack old challenges with different and more powerful tools – they cannot reframe. (Bolman & Deal, 1991, p. 4)

The model of analysis they propose goes beyond the individual theories of behaviour and is representative of midlevel theories of social process. Accordingly, I used their framework to guide my data collection and analysis stage.

The Data Collection Process

In his review of implementation literature, O'Toole (1986) noted that practitioners do not make use of implementation studies. This is understandable because each policy problem seems unique, supporting the illusion that no research has been done on the problem. The practitioner is unlikely to have enough time to discover structural similarities between his policy problem and research studies. Basic structural features of the problem must be probed when gathering data to allow clear descriptions to be made of general structural features of the study. O'Toole suggests the policy problem must be defined in terms that make it reasonably easy to see if insights and recommendations are applicable to other problem areas. I did this by closely referring to the implementation categories used by Mazmanian and Sabatier.

The most readily available source of data for this study was the public policy and implementation documents produced by the Government of Alberta, AECD, and post-secondary institutions. The AECD library and various university collections contain a comprehensive collection of documents on my research subject. To ensure that I did not miss any important relevant documents, I conducted structured interviews with key implementation decision makers. The key decision makers at AECD and Alberta post-secondary institutions for the period 1994 to 1997 were still available for interviews and were selected for their ability to provide insight into the processes and decisions behind the contents included in the key documents. My personal experience in the system and practicum work term at AECD also guided my data search. By carefully gathering, checking, and confirming my progress, I was able to develop answers to the research questions. The following sections provide a more detailed description of the research steps outlined with the research questions in chapter 1.

Data from Documents

Formal data collection started in 1997 through a practicum placement in the KPI project office of AECD. The practicum was arranged through the Department of Education Policy Studies at the University of Alberta and involved the equivalent of a full 40 days in AECD offices. During this time, I was allowed to participate in office activities, gather materials, and freely discuss KPIs and policy processes with the many managers I met. We formally agreed that I would document development of the KPI project in an unpublished paper called *Alberta Boldly Measures Where No One Has Before*. Following the practicum, the Department reviewed for me a more refined paper entitled *Implementation of KPIs by Alberta Advanced Education*, which I presented at the 1998 Administrative Sciences Association of Canada conference. The practicum experience and feedback on my initial paper provided the data used to formulate my problem statement and the research proposal presented at my candidacy examination in December 1998.

With an analytical framework in hand and feedback from my initial papers, a second round of data collection took place in the winter of 1999. I revisited my contacts at AECD and KPI contacts at several institutions to review my document list. During this time I also revisited the Government of Alberta libraries. Important documents and details about related projects in AECD came to light. The practicum experience put me in a privileged position to gather relevant documents. I discovered that as my association with the research participants lengthened, they revealed more documents and parts of the story to me.

Data from Interviews

Four expert interviews were conducted to ensure the completeness of the documents used in this study and to gain further insight into the significance of the documents. A fifth interview was used as a pilot to affirm my preparedness for this stage of data gathering. Based on my first stage of data gathering I was aware of the important role interview technique plays in the data gathering process. Like many before me, I learned that preparation for a fruitful interview is complicated:

> A number of issues emerged as important. Access was the first, and the strategies that researchers use to build relationships with those they are interviewing. Secondly, strategies for retaining a critical awareness of about the respondent's replies in the interview. The third issue involves an analysis of the context of the interview as it is an artificially arranged and set piece of interaction; and qualitative research places much emphasis on observation of the natural context. The fourth issue concerns validating the data that one gathers through interviewing strategies, together with questions of objectivity and bias. (Measor, 1985, p. 55)

These considerations were taken into account when I prepared to conduct four expert interviews.

Four expert interviews were conducted and utilised in this study. The interviews lasted about one hour. Each person was presented with my research questions and early drafts of Figures 4.1, 4.2, 5.1, 5.2, and 5.3 before the interviews. The questions used for the interviews are included in Appendix C. Two interviews were held with AECD officials familiar with the KPI project and the AECD accountability policy. . My practicum experience helped set a positive atmosphere for the AECD interviews. Two additional interviews were held with institutional KPI contacts involved with the University Co-ordinating Council's KPI committees. My experience as a student and management accountant helped create a positive connection for the other interviews. Each interview was audio-taped and transcribed. The participants were given, as described in Appendix A, a transcription of their interview and given an opportunity to opt out of the study before any materials were utilised. Following the advice of Weber (1985) I found that replaying the interviews was a useful reflective exercise and, as a result, follow-up phone conversations seeking elaboration and clarification occurred. Each of the expert interviews provided insight into the developments surrounding the document list and enabled me to revise the list of documents included in the Figures.

Data Analysis

Data analysis was not a rational independent step in the progression of this study. In a previous section, I noted my dissatisfaction with the low-level theories used to analyse data in some previous implementation studies. Recognition of the role of organisations and social processes was missing. Higher order theories about organisational processes were needed. Bolman and Deal (1991) developed a model that uses four organisational frames to understand organisational decision processes. They justify the approach because of the psychic prison mentality we fall into when only one set of ideas and processes is used to view a set of organisational developments. The use of a mid-level theory, therefore, appeared to be appropriate, because my study was directed at organisations that were dealing with governmental policy. I used the Bolman and Deal (1991) model to reflect on my first round of data collection. The model led me to ask better probing questions during the expert interviews, and resulted in the inclusion of the projects related to the KPI project found in chapter 6.

The interprevist paradigm implies that there are rich systems of meaning in the arrangements involving AECD:

> An understanding of the symbolic nature of organisation also provides the basis for an epistemology of management based on an appreciative wisdom that recognises organisation as resting not simply on the manipulation of cause and effect relationships, so much as on the patterning of symbolic discourse. Symbols and their relationships, i.e., patterns of contextually based meaning, become a principal focus of attention. (Morgan, 1995, p. 20)

According to Levitt (1980), attention to what implementation will look like dramatically reduces the chances of unforeseen implementation difficulties. Unstructured situations facilitate freedom, which is consistent with the new public management philosophy, but they also increase uncertainty for the administrators involved. In these situations, game playing is a natural human response. The literature on KPIs suggests that the KPI project is designed to constrain the degree of game playing. Games provide a structure, but also hide the uncertainty (Berne, 1964; see also Goffman, 1959). Levitt also draws attention to the need to recognise that technical, administrative, and interorganisational aspects of the problem are all interwoven. Yin (1984) also stresses the importance of this analytical step. Bolman and Deal's model was used to probe the case study and reflect on the data gathered through documents and expert interviews. The results of this analysis are discussed in Chapter 7.

My primary data source was the documents that I found to be relevant through the data collection stage. Interviews were used to confirm the documents list and clarify my understanding of those documents. Because they were used in a confirmatory role, a statistically valid selection of decision makers was not a concern:

> Purposeful sampling is not designed to achieve population validity. The intent is to achieve an in-depth understanding of selected individuals, not to select a sample that will represent accurately a defined population. (Gall, Borg, & Gall, 1996, p. 218)

My data collection occurred in two phases. The first phase included a practicum and preparation of a draft case report. Without a model it was hard to structure the problem and formulate probing questions to produce data about the case. Selecting the Mazmanian and Sabatier (1981) model was therefore a very important step. As an established policy implementation model, it prompted me to seek information that would not otherwise have come to mind. The interprevist paradigm also accepts that social understandings change with time. Before the second round of data collection and analysis, I used Mazmanian and Sabatier's model to consider what outputs could be expected. I also carefully reflected on the criticisms of KPIs as a policy tool. Both steps are an integral part of the case presentation and revealed aspects of KPI introduction that would otherwise have been missed. The second round of data collection resulted in the collection of more documents and a refined story line. The story line and related discussion are included in Chapter 4, 5, and 6.

Report Composition

The success of the Pressman and Wildavsky case contrasts sharply with the other 95 policy implementation case studies that O'Toole (1986) noted that had not been used by practitioners. The complex social nature of implementation problems is, however, suitable for a case approach:

> The distinctive need for case studies arises out of the desire to understand complex social phenomena. In brief, the case study allows an investigation to retain the holistic and meaningful characteristics of real life events—such as individual life cycles, organisational and managerial processes, neighbourhood change, international relations and the maturation of industries. (Yin, 1994, p. 3)

With this in mind, the case story and document analysis were formulated not only to provide a refinement of theory, but also to define situational variables so that practitioners might readily recognise conceptual similarities with other situations. Efforts have been taken to achieve this goal.

Case writing requires that I construct a story, and so increases the risk of misconstruing the data I collected:

> That we as researchers construct that which we claim to find is a theme of the various chapters in this volume. For many of us, taking a constructionist stance means, as a starting point, challenging the traditional objectivist and rationalist views of inquiry, which keep the world, both physical and social, at a distance, as an independently existing universe, and which hold knowledge as reflecting, or even corresponding, to the world. (Steir, 1991, p. 1)

To minimise the negative aspects of this, I followed Yin's recommendations. The writing process started early, so the composition process also overlapped with the previous research stages. The shape of the report was considered in the initial design of the study. The presentation of the case to AECD and at ASAC '98 provided valuable feedback about the sequencing of the material. I learned what Yin meant when he observed that "the case study report can itself be a significant communication device" (Yin, 1994, p. 130). The case report became more analytical to encompass the aspects of the case presented to me, and this analysis is provided in chapters 4, 5, 6, and 7. Reactions to the story-line presented through the Figures that were used in the expert interviews confirmed the appropriateness of the changes and led to some further redrafting of areas where I had rationalised away conflicts in the documentation.

Trustworthiness

This study was not worth the research time if the results are not transferable or dependable. This section describes the steps imbedded in my research plan to establish the trustworthiness of my study. I accept Merriam's (1988) argument that it is the full set of research steps, starting with how the project is conceptualised through the design, collection, analysis, and presentation steps, that moves reviewers to conclude a research report is of sound quality.

Quality starts with careful design of the data collection, data analysis, and participant feedback activities that I have already described. My work experience and graduate work placements gave me a working knowledge of the managerial and policy context of this study—constituting a fairly substantial pilot project. Experience is an essential quality for those wanting to use the "art" of case analysis, according to Stake (1995). I reduced the possibility of collecting irrelevant issues or defining insignificant variables through preparation and practice. This also enabled me to detect and probe new issues that arose during the study and especially during the expert interviews. The strong degree of support for my preliminary papers presented to ASAC98, AECD, and the ongoing interest from The Society of Management Accountants of Canada (SMAC) are positive peer reinforcement of research quality. Exposing my work to analysis by informed parties has also helped me to reflect on my predispositions and ensure that what I have presented is trustworthy.

The trustworthiness of qualitative research is generally discussed, according to Guba and Lincoln (1982), with reference to the concepts of credibility, transferability, dependability and confirmability. These concepts were considered in the design and conduct of this study.

Credibility is established with reference to the context and subject of the research inquiry. In this study, taking several intermediate steps in the construction the case story-line, safeguarded credibility. This started with my practicum which resulted in preliminary drafts of the case that were reviewed by knowledgeable members of AECD. The Bolman and Deal (1991) model was used to help me reflect on the multiple realities that the participants in the study faced. The results were triangulated by further data collection, expert interviews and data analysis.

Transferability refers to the extent by which the results of the study can be applied to other contexts. In this study transferability was considered in the selection of the Mazmanian and Sabatier (1981) model to guide the initial development of the case. As a popular policy implementation model it helped me describe aspects of the case in terms that other policy implementation researchers are familiar with. A wide variety of documents and opinions were collected so that a thick description of the context of the study was possible. The purposive sampling of four experts involved in the case for interviews further safeguarded the transferability of the study.

The concept of dependability refers to the extent other researchers could replicate the finding of the study if a similar research enquiry was conducted. Official documents were the primary source of data for this study. Dependability of the findings is demonstrated through the procedures employed to ensure a complete list of official documents. This started with a practicum at AECD, rigorous library searches and peer reviews of the list of documents used to develop the case story-line. Four experts were presented with the document list and the purpose of the study to confirm that they could not detect that any significant documents were not included. A further safeguard on the dependability of the study was the use of the established theoretical models. Mazmanian and Sabatier's (1981) policy implementation model was used to structure the initial enquires into the case. Bolman and Deal's (1991) was utilised to help me describe conflicting information that arose about the documents used and reduced the temptation to dismiss contradictory data.

Confirmability refers to extent to which the findings of the study were determined by the context of the study and not by my interests and biases as a researcher. Confirmability was safeguarded throughout this study by providing a clear data trail, which was reviewed by knowledgeable experts. Care was taken to ensure that findings are attached to specific source documents allowing other researcher to audit the findings. Bolman and Deal's (1991) model was used to as an additional reflective step in the composition of the case report. This helped reflect the inconsistencies in the documents and different realities experiences by the experts I interviewed. Personal biases arising from my past involvement with KPIs as an accountant and as an educator obviously influenced my inquiry. These personal experiences also help me to be cognisant of the processes described in the research documents and by the experts interviewed. The triangulation of three strategies, a clear document trail, use of expert interviews, and by employing theoretical models in the analysis process has helped me deal with personal biases which could have reduced the confirmability of my observations.

Ethical Considerations

At the time of this study the University of Alberta had set out six ethical guidelines for research involving human participants (USPHRP, 1995), that have subsequently been revised. The research steps were designed to comply with the university's guidelines. An ethics committee of the Faculty of Graduate Studies at the University of Alberta reviewed and approved in the research steps in April 1999. Participants were fully informed of the purpose of the study and freely consented to participate. A copy of the letters used to obtain the knowledgeable consent of the participants in the study is included in Appendix A. The participants were also asked to affirm their consent after they received and reviewed copies of the interview transcript. A copy of the second consent letter is contained in Appendix B. None of the participants withdrew from the study. No reference to the biographical profiles of those I interviewed were included in the study to safeguard the anonymity of the participants.

Summary

Chapter 3 outlined the processes used to conduct this study into KPIs as a policy implementation technique. The study was designed as an implementation case study. Mazmanian and Sabatier's (1981) implementation model was used to guide the design of the study. The primary source of data for the study was document analysis. Four expert interviews were conducted to provide assurance about the completeness of the documents used in the study and to gain a deeper understanding about the content. Bolman and Deal's (1991) model was used to provide a richer description of the case and the multiple realities faced by the participants in the study. Finally, the chapter described the specific steps taken to safeguard the trustworthiness of the study in terms of its credibility, transferability, dependability, and confirmability.

Chapter Four

Accountability Policy Development and its Impact on AECD

This chapter records what I learned about the development of the Alberta Government's accountability policy and the impact of the policy on the Alberta Department of Advanced Education and Career Development (AECD). My first research question **was "How the Alberta Government's accountability policy developed,"** and this is discussed in the first section of the chapter. The second research question was **"What was the impact of the government policy on AECD policy,"** and this is discussed in the second part of the chapter. The documents used to compose the story-line were gathered from public records and the list of documents was reviewed with AECD officials and members of the University Co-ordinating council to ensure there were no significant omissions or misinterpretations.

In chapter 2, I described the declining financial situation of the Alberta Government and how the annual deficit became the dominant political issue. On a per capita basis, the Alberta deficit was one of the biggest among the provinces. The province was rapidly moving to the bottom of the fiscal pile despite Alberta's natural advantages. Consequently, as participants in this study pointed out efforts to restore trust in the government to manage public processes became very important.

The general agreement about the importance of the deficit did not extend to the reasons presented by political groups for the deficit. Some analysts argued that the deficit was due to corporate subsidies and inappropriately low income tax rates that had been subsidised by oil revenues. In 1981 royalties amounted to $6 billion with the price of oil around $40 per barrel. By 1986 oil had fallen to $10 a barrel and royalties to $2.7 billion. In addition, these analysts pointed out that Alberta's programme cost grew only 2.3% a year between 1986 and 1993—the lowest rate in Canada (Taft, 1997). Other analysts argued that government had grown too large and unresponsive and needed to be restructured to get finances back in order. Anecdotal evidence of government waste was offered as proof that the deficit could be addressed by making government more efficient (Lisac, 1995). Evaluating these political arguments is not part of this study, but the arguments highlight the political environment faced by the government in 1992.

Dunn (1981) argues that policy emerges through three interrelated phases of problem structuring. These phases are problem sensing, problem conceptualisation, and problem specification. Each phase is interdependent and so the process of problem structuring can start with any one of them. My government participants informed me they felt the Government of Alberta started structuring the accountability policy by first sensing the importance of the deficit and the need to establish a break with the previous premier. My other participants told me they believed there were no rational processes guiding the Government's policy actions. Regardless of these contradictory views about the Government's policy actions, the policy documents appeared to be consistent with processes outlined by Dunn. This was confirmed by my four expert interviews. I have consequently organised the development the accountability policy into three developmental phases identified by Dunn.

Development of the Accountability Policy

Public discussions regarding a new accountability approach started in early 1991, under Premier Getty. Ralph Klein became leader of the Progressive Conservative Party on December 5, 1992, after Premier Getty retired. To establish his own mandate, Klein called for a general election within a few months of becoming premier. He received his own electoral mandate on June 15, 1993. The mandate centred on restoring confidence in government. The government set out a series of plans to ensure the "Alberta Advantage" included a fiscal advantage. Figure 4.1 lists chronologically the key policy documents that announced the government's plans.

Premier Klein did not have much time to establish himself as a leader with new ideas. He turned for advice to groups other than experienced public officials, who were seen as responsible for the deficits. Technological advances such as cable news and Internet communication gave many people easy access to information, thereby creating pressure on governments to make decisions faster than traditional internal processes can facilitate. The managerial implications of the circumstances were significant. Mark Frequin, an official in the Ministry of Education in the Netherlands, noted that "knowledge is the back bone of policy making. Without knowledge it is impossible for policy making to exist. Similar to a backbone, knowledge has to be solid as well as flexible to be of service to policy making" (OECD, 1996).

Premier Getty had started building the backbone of an accountability policy in early 1991. The government turned to the Banff Centre For Management to facilitate a public consultation. Under the theme *Towards 2000 Together*, seven roundtable conferences were held at different locations in Alberta. Although designed to increase public awareness of the issues, the process was also carefully engineered. Roundtables were designed to provide direct consultation with Alberta residents. This meant policy stakeholders' groups were largely left out of the process:

> The logistics of getting the right mix of people at each round table session was a major challenge that was rendered even more difficult by a tight timeline. Instead of determining a list of stakeholder groups and then inviting each group to send a representative, we choose to seek out individuals who showed an interest in thinking broadly and creatively about complex issues. (Simpson, 1992, p. 5)

The views expressed during the *Towards 2000 Together* discussions become the information from which the accountability policy emerged. The following figure list the documents that recorded the development of the Alberta Government's accountability policy.

PROBLEM SENSING (initial stage)	
Simpson Report	May - 1992
Report to Albertans	March – 1993
Seizing Opportunity	April – 1993
A Better Way	February – 1994
Beyond the Bottom Line I	September - 1994
PROBLEM CONCEPTUALISATION (development stage)	
Government Accountability	October – 1994
Beyond the Bottom Line II	December – 1994
Measuring Up	December –1994 and June – 1995
A Better Way II	February - 1995
PROBLEM SPECIFICATION (policy formalisation)	
Government Accountability Act	January – 1996
Measuring Up '96	June – 1996
Introduction to Accountability	December - 1996

Figure 4.1. Alberta government policy document timeline

Initial Stage: Problem Sensing

The *Towards 2000 Together* consultations resulted in a report, *Roundtables on the Future of the Alberta Economy: A Continuing Journey*, now referred to as the *Simpson Report* (Simpson, 1992). Simpson concluded, "We will need to evolve new visions of Alberta's place in the world, and to create new structures and processes to move us towards our vision" (p. 1). Past structures of governance were rejected as suitable only for a past age. A clear conclusion of the report was that the government's responsibility is to ensure that market mechanisms function freely to create wealth. In this regard, Simpson reported that Education and Health were dependent sectors—expenditures on these sectors do not create wealth. These conclusions seem out of place, given the reservations about the supporting analysis contained in the report. Simpson freely admitted that analysis of the roundtable discussions was not complete. He noted the sharing of ideas in the discussion groups had resulted in a general sense of accomplishment but also a lack of meaningful conclusion for the participants. "At the same time, there were varying degrees of frustration and disappointment that we hadn't sufficient time to reach consensus on a series of concrete recommendations, and to create detailed action plans for implementing these recommendations" (Simpson, 1992, p. 10).

Despite the reservations, a general sense of enthusiasm for government restructuring was presented. The report recommended a new role for government and public service, stating:

> In this new world, the role of government may be to manage the process rather than the issues. Governments may move from playing the role of arbiter of values, to acting as a facilitator—guiding the players through a process of change by providing information, outlining opportunities, developing supportive policies, and providing a forum in which the stakeholders can come together to plan and discuss. (Simpson, 1992, p. 17)

About public services, he went on to say:

> Government is facing multi-faceted and sometimes conflicting public expectations relating to public services. As pressures on the government to meet new social and economic challenges in the economy increase, as resources dwindle, and as the formerly rigid distinctions between "public" and "private" become blurred, we should be looking for innovative approaches to the design, delivery and financing of public services—approaches that involve partnerships between "public" and "private" sectors. (Simpson, 1992, p. 17)

The report fell strongly on the side of a smaller government and favoured restructuring of government activities.

Acting Premier Klien started roundtable discussions about the Alberta budget late in 1992 based on the model used to develop the *Simpson Report*. On a political level, the process was important as a way to distinguish the Klein government from the Getty Tories (Lisac, 1995). Premier Klien organised the roundtables around ways to reduce the cost of government, to stimulate public sector change, and to focus everyone on deficit reduction (Alberta Premier's Office, 1993a). The process concluded with the publication of the *Report to Albertans* in March 1993. Al and Berta were introduced in the report. They were a fictional couple living beyond their means; the report described what would happen to their family if things went on unchecked. The metaphor captured a lot of interest. The *Report to Albertans* became background material for the budget that Klein presented just before the call for the June election. In the metaphor, Al and Berta had just to adjust their spending habits and soon they would again enjoy worry-free prosperity.

Premier Klein made use of the *Simpson Report* and the *Report to Albertans* to create a new economic strategy, which became the central document for the June 1993 election. He highlighted the suggestion in the *Simpson Report* that government get out of the business of delivering services, stating:

> Alberta's new economic development strategy is based on changing the roles of and relationships between government, the business community, and individual Albertans. These changes are essential – in order to succeed in the future, we must have all of Alberta's economic players working together. (Office of the Premier, 1993b, p. 1)

The strategy was explained in a report entitled *Seizing Opportunity* that was released in April 1993. In this report specific goals for all areas of government activity were announced. Statements were made throughout the document indicating how the government would use agencies and market mechanisms to ensure that efficient and accountable services would be provided. The government asserted the changes in government operations would increase opportunities for economic growth. It is important to remember these documents were developed by Premier Klein in consultation with his own advisors and roundtables with limited involvement from government bureaucrats and stakeholder groups.

Seizing Opportunity was a good name for the strategy, because the Klein government won a majority in the June 1993 election. This endorsement was used to justified rigorous development of the accountability ideas found in both the *Simpson Report* and in *Seizing Opportunity*. The general direction was converted into an overall plan, released in February 1994, entitled *A Better Way: A Plan for*

Securing Alberta's Future (Alberta Treasurer, 1994). The reports starts by stating that "Albertans told us they want..." (p. ii). A substantial list of goals and priorities for the government was presented. It was organised by defining and organising government into five core businesses. The role of AECD in this, according to the government, was to ensure that there is an adequate productive and talented workforce.

In connection with the plans for the core businesses, plans to implement the new role of government envisioned in the earlier documents were also announced in *A Better Way*. The report specifies that "by focusing on outcomes and keeping track of results, government departments can adjust programs as they learn more about what works and what does not" (Alberta Treasurer, 1994a, p. ii). Each department had been ordered to provide a three-year business plan that would be updated annually. The business plan had to set out specific measurable targets to reflect public expectations. The Treasurer asserted that the government would "focus our efforts and resources to strategies and programs where we get the best results" (Alberta Treasurer, 1994a, p. ii). The role of the government as a facilitator will be implemented by transferring service responsibilities to specialised agencies, who, it is argued, would be more efficient and responsive than government departments. Underlying this plan was a desire to focus on outcomes and not the stewardship of inputs. In *A Better Way* the first official mention of accountability is made in an explanation about goals:

> And most importantly, they begin *(business planning)* the important step of outlining expected results and the performance measures that will be used to measure our progress towards meeting the goals we've set. In short, business plans demonstrate our commitment to open, accountable government. (Alberta Treasurer, 1994a, p. 1)

The *Simpson Report* and *Seizing Opportunity* established the rules for the planning and budget documents associated with *A Better Way*. Reduced spending was the major and immediate focus of that document. The Treasurer explained that performance measures would ensure that quality services were maintained while the budget restructuring occurred. The government had also announced an intention to tie department funding to progress toward specific goals of the government.

AECD provided a brief 16-page plan, which included a mission statement, a mandate, and goals, that were included in *A Better Way,* along with the business plans of other departments. The timelines for the production of *A Better Way* had been so tight that the plan also included a promise to release a more detailed document at a later date. The most telling and immediate feature of all the plans was a dramatic cut to all departmental budgets. It is noteworthy that AECD had one of the most developed plans of all the government departments. Although it was a preliminary plan it contained detailed strategies and timelines to demonstrate how the Department was working toward its goals.

With the business plans and related budget in place for 1994/95, the government started to look forward to 1996/97, when a surplus was projected. The government was worried about what would happen to the initiative of being more accountable as deficit worries subsided:

> On the accountability side, few will disagree that the government has done what it said it would do. Quarterly budget reports and consolidated financial statements have been released in record time and business plans are beginning to set out performance measures. Boards and organisations have been given flexibility to make decisions but some people complain that government is "passing the buck" on tough implementation decisions. (Alberta Treasurer, 1994b, p. 2)

New budgetary roundtable discussions were held starting in September 1994. The purpose of these discussions was to focus on the goals for the five core businesses.

The roundtable discussions centred on a document entitled *Beyond The Bottom Line*. Al and Berta's story was brought up to date as a focal point for these discussions. Two themes were stressed. The total debt was presented and replaced the deficit as the immediate financial problem, and arguments were made to extend the financial caution until the net debt was eliminated. The need to have measures to ensure accountability to ward off criticism that a tough decision had been passed on to others was emphasised. "We may agree or disagree with the particular measures set by these states. The important point is that they have taken their goals and strategies and decided how they are going to measure their results" (Alberta Treasurer, 1994b, p. 19).

The invited roundtable participants were encouraged by this and the other materials in *Beyond The Bottom Line* to recommend performance measures meaningful to them. There was an acknowledgement that agreement would be hard, but it was not necessary. The key point was a set of measurements and reporting on them would facilitate and demonstrate accountability.

Problem Conceptualisation: Development Stage

The deep spending cuts reflected in the policy documents from 1992 to 1994 set a new tone for the Government of Alberta. During 1994/95, the government's policy direction was explained through further policy documents directed at clarifying expectations for departments as they were starting to flesh out the new policy direction. The details of what accountability meant had to be worked out.

Alberta's Auditor General added his support to the policy direction through new audit initiatives. The Auditor General of Alberta has a responsibility to the legislature to conduct financial and beneficial audits of government departments and agencies. The Auditor General announced more emphasis on comprehensive auditing by stating that "accountability is an obligation to answer for the execution of one's assigned responsibility" (Auditor General, 1994, p. 1). Comprehensive auditing includes a careful assessment of the goal-setting process. It also includes evaluation of progress toward those goals. Because of the public media attention paid to any negative comments by the Auditor General, the recommendations of the Auditor General are taken very seriously, even though the Auditor General has no direct control over government departments.

The first three-year business plans, presented in *A Better Way*, showed differing levels of detail. The performance measures varied from vague to extremely specific. The Auditor General used his unique position to observe this inconsistency and to react. He published a paper in October 1994 entitled *Government Accountability*, in which he set out clear expectations for goal setting, performance measurement, and assessment (Auditor General, 1994). To judge whether good value was received from public expenditures, the Auditor General recommended that the understandability, relevance, reliability, and comparability of departmental plans be improved by emphasising output. "Once outputs and their costs are known, a sound basis will have been established for progressing to a more comprehensive assessment of performance and value for money" (Auditor General, 1994, p. 2). The Auditor General said that a strong causality between expenditure and goals was necessary and presented a conceptual model of accountability to reinforce that. The requirement for causality had direct implications for the way goals were to be presented, services defined and delivered, and measures taken that would help a department's cause. Subsequent business plans reflected the Auditor General's expectations.

In December 1994, the Treasurer published the further summary of the budgetary roundtables called *Beyond the Bottom Line: A Summary*. The role of measurement was clarified in this report.

> Measurement is essential for accountability. But we need to be careful about the difference between simply collecting information for the sake of having it and measuring key results and assessing performance on that basis. (Alberta Treasurer, 1994c, p. 5)

The talk of new visions and economic restructuring that was present in the roundtable workbooks was dropped. In its place this report stated that

> overall, participants believed that good, reliable measures of performance and results were essential to accountability in governments. (Alberta Treasurer, 1994c, p. 5)

The report described over 100 measures that participants had suggested for the five core businesses of the government. The change in tone is most noticeable in the conclusion to the report and highlights the shift in focus to accountability.

> But the biggest test is whether or not the government listens and takes action. In the weeks and months ahead, participants will have to watch carefully to see if their messages to government are again reflected in the actions and decisions that are taken. (Alberta Treasurer, 1994c, p.2)

The government was already preparing to report performance measures before the issuance of *Beyond the Bottom Line: A Summary*. The first draft of *Measuring Up* was published in December 1994, but the final version was not released until June 1995. To activate the funding links announced in *Budget '94* and *A Better Way*, the Provincial Treasurer initiated an annual report card for each department (Alberta Provincial Treasurer, 1994). The government published how each and every department contributed toward accomplishing the government's goals. In the first report, *Measuring Up*, Treasury clarified that this process would be used to allocate funding in the next budget cycle. They also established that multiple measures and experimentation with measures would be used to learn about what should be measured.

The delay in releasing *Measuring Up* was apparently due to troubles that emerged in reconciling departmental goals with government goals and measures. I was told that Treasury produced the report and then presented it to departments for reaction in December 1994. Although the introduction to the report is formatted around the five core businesses of government, the performance measures are not presented this way. The Treasurer had organised the measures into sections for each department. Consequently, the discussion and revisions established and explained the distance between the performance measures used to evaluate each department by the government and the detailed sets of measures included in departmental business plans. When the report was released to the public in June 1995, the differences between the government measures and those used in the department plans had been reconciled. Much of the performance information in this first report was only briefly explained, and for a significant number of measures there was only a note explaining that the data were not yet complete.

Measuring Up was not presented as a complete report card:

> With the advice of Albertans we can develop an essential set of performance measures, we can start gathering information, and by next spring, Albertans will see the first comprehensive report on the performance of their government. (Alberta Treasurer, 1994d, p. 2)

My interviews revealed that *Measuring Up* engaged the departments in a process of continuous improvement on the basis of a discussion of the KPIs. One respondent in the Department noted the difference in the approach to business planning this way:

> To me it's triggered a different approach where before three or four years ago when we were doing business plans by sort of extracting information… In the last year and half doing those things the information was being volunteered very quickly. People we were contacting were saying I need to understand where this can fit. This is what we are trying to do—does it fit and where does it fit best. …The challenge has been, and I guarantee we haven't solved all the problems there, is sort of showing there is relationship from down to here so that people can find their way.

By indicating that *Measuring Up* was an early effort and imperfect in many ways, public discussion shifted toward the measures and not exactly what the measures revealed. Public disclosure by the Treasurer was an incentive for meaningful discussion about what was right and wrong about the measures used. Each year the measures should become better indicators of department intentions and focus on areas of concern. The effects of the discussions are noticeable through the substantial changes made in *Measuring Up* '96.

In *A Better Way*, the Treasurer asserted that the government would "focus our efforts and resources to strategies and programs where we get the best results" (Alberta Treasurer, 1994a, p. 2). This assertion added a financial incentive for the Department. Following the release of *A Better Way* in February 1994, two rounds of public budget discussions occurred. The first concluded in September 1994 and the second was completed in December 1994. The resulting report, *Beyond The Bottom Line*, clarified what was expected. Although it seemed that departments would have a lot of planning flexibility, the reports concluded that the measures selected must give a clear direction to the Department and be linked to government goals. Therefore, these documents were significant to the development of the 1995/96 budgets. According to the AECD officials to whom I spoke, the delay in the release of *Measuring Up* from December 1994 to June 1995 was useful. One respondent noted

> What Treasury did, what Jim Dinning (the Provincial Treasurer) did, he sent out a document saying that this is what we think we should be measuring in Alberta. We'd like your feedback, your responses, good bad indifferent and then June became the actual document.

The delay gave them time to think through the implications of the government measures and reflect them in their plans before having to engage in public debate about *Measuring Up*. This reflection was evident in two typical responses from government officials:

> I think there was an overall edginess in government overall because what they did with the December document was put forward things that people were a little queasy about ......we didn't necessarily have the methodology in place to support these things.
>
> It's a reality that every action has a reaction and some of those you can anticipate and some of those you can't, some are good and some are bad. That's a given. Everyone around here knows that. We try to minimise the bad ones. When you become aware of them, we try to fix them.

A Better Way II was released in February 1995 and contained three year business plans for 1995/96 to 1997/98 for the government and all of its departments. What is most significant about the report is that it confirmed the use of business plans and performance measurement as part of the budgetary process:

> The biggest success of the business plan process to date is that the plans have guided the actions of departments and the decision of government. They have not become "shelf liners" ... set aside and

> forgotten. Instead, the plans have been rethought, modified and changed to respond to changing circumstances and needs. Overall, the direction and key themes for change remain the same. (Alberta Treasurer, 1995, p. 1)

The language was also more consistent throughout the report, with users of department services being viewed increasingly as customers. With *A Better Way II,* the completion of the shift away from departments as keepers of a public mandate to all of society was evident. Advance notice of the release of *Measuring Up* was announced in *A Better Way II* as well. The announcement solidified the link between planning and monitoring progress in the government's approach to accountability.

An important shift change in priorities was confirmed in *A Better Way II*. According to the report, ongoing consultations regarding *Beyond the Bottom Line* had revealed that the descriptions of the core businesses were unclear. The five core businesses were changed to three areas of priority: people, prosperity, and preservation. Discussions with AECD officials revealed that they saw the change as accidental, and arising from the Premier's attempts to find a catchy way to present his priorities. Because I can find no reference to lack of clarity about the core businesses in *Beyond the Bottom Line II,* the Department officials' argument is believable. Regardless of the cause, the presentations of the government goals and priorities benefited from the change. The explanation of the goals, strategies, and expected results for each area is coherent and more specific than in *A Better Way I*.

Turning the government's ideas into operational realities was an important theme found in *A Better Way II:*

> Business plans are an essential component of a strong foundation for the future—pointing the direction, setting the goals and strategies, and focusing on real results. With the focus on people, on prosperity and on preservation, we will build a strong foundation and reach our destination of a secure future for the province. (Alberta Treasurer, 1995, p. 13)

The Treasurer pointed to the four pillars that the government was using to build the foundation—the government's business plan, measuring performance and results, a debt plan, and *Budget '95*. AECD's strategic planning process that had been announced in *A Better Way I* and had resulted in the Department's new policy document, *New Directions*, was singled out as evidence of the changes in government. As an apparent award, the new Access Fund of $47 million was announced in *A Better Way II*. All the business plans contained more detail than previous years and the differences between the government and department roles were easier to follow. However, with all of the attention on operational realities, there was no specific mention of accountability in the government's business plan.

According to Dunn (1981), the conceptualisation phase of policy development goes beyond sensing and identifying a problematic situation. The conceptual stage occurs when the basic terms and perspectives are established. Starting with *Government Accountability* through to *A Better Way II*, a business perspective is progressively more prevalent. Definitions of the basic terms about the budget and planning process, the deficit, and performance measurements are all fairly clear by the end of February 1995.

Problem Specification: Formalisation of the Accountability Policy

Following the policy modifications and related discussions of 1994/1995, the government moved to pull the accountability initiatives together into a formal accountability policy during 1995/1996. The rapid drop in the budget deficit decreased the urgency attached to fiscal matters and also contributed to the change in emphasis. The Treasurer noted in *A Better Way II*, "the year ahead we move beyond a focus on dollars and cents to a focus on securing the future" (Alberta Treasurer, 1995, p.1). Establishing more stable and formal accountability processes was seen as a critical step in securing the future. During this phase of policy development legislation, accountability processes, stable reporting practices and adjustment of auditing standards were the three initiatives used to formalise the accountability policy.

By 1996 the *Debt Reduction Act* (Alberta Legislature, 1993) was losing significance as an accountability instrument because the annual deficit had dropped so much faster than required. There was concern that other issues could displace the focus on accountability now that there was no immediate financial crisis. A related concern was that the passage of time would dull even the best policy intentions of future governments. In response to these concerns, the government introduced legislation to entrench the reporting practices established over the previous two years by making them legal requirements. On January 12, 1996, the government passed the *Government Accountability Act* (Alberta Legislature, 1996). The Act requires the Treasurer to report annually on the government's plans, including its goals, explicit performance measures, and desired results. The business plan must be for three years and the goals must refer to the core businesses of the government. Interestingly, the core businesses are not defined, thereby allowing for further amendments to the government vision without having to change the legislation.

The *Government Accountability Act* also imposed similar requirements on an extended range of government agencies. Each minister was required to provide to the Treasurer a business plan with specific goals relating to the core businesses of the government, measures for evaluating performance, and the desired results to be included in the government's business plan. The Act does not require the departments to use the government goals and measures, thereby allowing each department some flexibility. The Act does extend the Treasurer's influence over departments by also requiring the department to include any other information that the Treasurer considers appropriate. Imposing these same reporting requirements on all accountable organisations also significantly extended the reporting practices. An accountable organisation was broadly defined to cover any government agency or organisation receiving substantial government resources, including colleges and universities. The *Government Accountability Act* tied AECD and the universities directly into the accountability chain.

In compliance with the *Government Accountability Act,* the Treasurer published *Measuring Up '96* in June 1996. The Act required this report to contain consolidated financial results, comparison of actual results with desired performance, an overview of results achieved in the core businesses, and any other information the Treasurer wished. *Measuring Up '96* fulfilled these objectives though performance measures that did not include 1995/96 data because the information was supposedly not available (Alberta Treasurer, 1996). The Treasurer chose to use his message to emphasise the role of the report in accountability. The dual purpose, according to the Treasurer, was to explain what the government had achieved through its expenditures of public money and to improve results. By comparing results to the goals, the Treasurer reasserted that "we can make choices about continuing certain programs, improving them, or abandoning them entirely and trying a new approach" (Alberta Treasurer, 1996, p. 1). The format of the report was altered so that core performance measures and their relationship to the government priorities were clearer than they were in *Measuring Up '95*. The emphasis on the process of accountability overshadowed the analysis of areas of success and failure in the report.

The Auditor General increased the credibility of *Measuring Up '96* by reporting on his audit of the core performance measures. It was not clear from the *Government Accountability Act* that an audit was required, so the audit set an important precedent for future reports. No audit assurance was provided by the Auditor General, because the information systems and standards for auditing those systems are still under development. Normally, such a circumstance would result in a negative audit opinion rather than the non-opinion provided. The distance and differences between the department plans and measures and those of the government were again made clear when they were excluded from the Auditor General's report. The Auditor General used his role to emphasise the need for the government to link the financial information with the core measures. Although his comments were not particularly insightful, the inclusion of an audit report in *Measuring Up '96* elevated the independent role of the Auditor General in the accountability process.

In December 1996, the Auditor General reissued *Government Accountability* as *Introduction to Accountability*. The contents of both documents are substantially the same. Through this document, the Auditor General repeated his definition of accountability. Following up on his report in *Measuring Up '96*, he makes it clear that the Auditor General will issue opinions about the fairness of the performance reports of all government units. He also states recommendations will be made to improve the effectiveness of the reports. The Auditor General's intentions elevate his role in the accountability process because a negative opinion by the independent government agent would be conspicuous. Therefore, the clear accountability expectations held by the Auditor General and presented earlier in this chapter become an important guide for departments and agencies of the government.

Commentary

The preceding overview briefly described the development of the Alberta Government's accountability policy. Before proceeding to the section concerning the impact of government policy on AECD, a discussion of the Mazmanian and Sabatier model (see Figure 3.1) will help to keep the case-study in perspective. The first requirement in the model is tractability of the problem. Faced with the need for substantial behaviour change to address the deficit, the government defined the problem as accountability in the problem sensing stage. During the problem conceptualisation phase, the government worked on what Mazmanian and Sabatier refer to as the non-statutory variables affecting implementation. Media attention and public support were increased through discussion reports, and civil service leadership was engaged through the changes in the public process, resources allocations, and adoption of the business perspective. In the last stage, the government used legislation to improve what Mazmanian and Sabatier describe as the ability of the statue to structure implementation. The combination of clear government goals, strict budgeting requirements, and the *Government Accountability Act* became a formidable implementation force. I have found no evidence that these steps were rationally designed in advance. However, all three independent variables in the Mazmanian and Sabatier model were strongly aligned, providing a compelling environment for agencies to implement policy consistent with the government's policy.

The Alberta Post-Secondary Education Context

The policy steps by the government had a direct impact on AECD and how AECD dealt with the post-secondary education system and is the subject of my second research question. This section provides some background context related to the second research question. The system at the time of the study was large, including 4 universities, 11 colleges, 2 technical institutes, 4 vocational colleges, and 5 private university colleges. AECD provided over a billion dollars in grants each year to support the programmes offered to more than 110,000 full-time students in 1994/95. With so much at stake, AECD monitors carefully government policy in Alberta and other jurisdictions to ensure its practices are current. Most of the material mentioned in this section was acknowledged as formative in their development of accountability measures in *A Funding Framework For Alberta Post-Secondary Education (AECD, 1995a).* Department officials brought those references not directly mentioned in *A Funding Framework* to my attention and reference copies were provided to me from Department files.

In September 1992, AECD made a proposal to the University Co-ordinating Council of Alberta, called *Performance Indicators and Accountability Measures.* Through the paper, the Department indicated its interest in the work of the Stuart

Commission in 1991 and the Segal Commission into university education in 1992. The University Co-ordinating Council has no legal authority over universities but is a representative body created to provide a forum through which common concerns can be addressed (Andrews, Holdaway, and Mowat, 1997). AECD requested that the universities immediately start development of performance indicators that explained their mission to the public and the government:

> Again, Dr. Segal reports, "Communicating to the public in clear and consistent ways about what universities do and how well they are fulfilling their functions is the essential nature of public accountability." The disadvantage of striking a committee to review the issue is that it delays addressing the matter and may not be viewed as positive or action oriented enough by government. (AECD, 1992, p. 3)

The Department then recommended that the University Co-ordinating Council consider the performance measures suggested by the Smith Commission, and requested that they develop a reporting strategy. From this document, it is clear that the Department was encouraging universities to address the issues rather than telling them how and what to include in a comprehensive accountability reporting system.

Dr. Stuart Smith conducted a major study to identify meaningful performance measures in 1990 to 1991. The Association of Universities and Colleges of Canada sponsored this study. His report became the seminal work on performance measurement in the post-secondary sector. Smith (1991) recognised that many measures are useless as performance indicators since no value judgement can be attached. Smith concluded:

> the real need ... is for measures which indicate how well the university system is meeting the reasonable expectations of its own society and how well a given university is fulfilling its own declared mission. Such measures would permit accountability within the society which is funding the university system, and within each individual university community. (Smith, 1991, p. 128)

The Smith Commission devoted a lot of time to considering what kinds of measures capture the reasonable expectations of the society. Smith noted that

> each university is a community with its own mission and priorities. The members of each university community must be kept informed of the extent to which they are succeeding in their stated goals. In addition, both the students (current and prospective) and the public at large are the university's consumers and it is wise policy to keep them well informed. (Smith, 1991, p. 124)

Each university has different goals, therefore their managerial processes are not comparable. Smith recognised that while throughput and input measures are important management tools, community expectations are best measured by visible output measures.

The Smith report stimulated a number of provincial efforts that Alberta monitored. Ontario and British Columbia responded quickly to the *Smith Report,* establishing their own accountability projects that closely matched the intentions of AECD. It was made clear to me that monitoring these early projects had a lot of influence on the team that was ultimately selected to initiate the KPI project for AECD.

Ontario commissioned its own study about university accountability in 1992 (Broadhurst, 1993). The resulting report established the basis of Ontario's approach to performance measurement. The report tries to balance the independent status of universities with the interests of government and other stakeholders. Consequently, the focus is on the development of governance and reporting structures to demonstrate accountability to all the stakeholders. Therefore, university outputs are not directly linked to the contribution of public funds. The *Broadhurst Report* produced healthy discussion. The broad intentions also led to an extended implementation process.

British Columbia also established a KPI project in 1992 to improve accountability. The government intended to use the resulting accountability framework to shape policy and public funding decisions (Schlatter, 1992). They adopted the open systems model to categorise accountability measures. They have indicators for stakeholder expectations, inputs, internal measures, and outputs. Several studies helped to refine their approach (AG, 1993; CCAF, 1993; Ministry of Education, 1992). The measurement model is well developed. Like Ontario, full implementation has not been achieved. The year 1996 was a pilot year for the British Columbia project. From the results, further discussions were to be held. The pilot study revealed a need to align the mix of measures more closely with the government's plan for the post-secondary education system.

A popular approach to accountability reporting in the business sector is the Balanced Score Card (Kaplan & Norton, 1992). This approach divides performance measurement into four perspectives: learning and growth, financial, customer, and internal-business processes. The National Association of College and University Business Officers (NACUBO) recommends this approach (Kidwell, 1994). NACUBO is providing ongoing support for this approach. The results are useful. A similar undertaking in Canada has helped refine Alberta's plans (AUCC,1993).

The American Association of State Colleges and Universities (AASCU) has also done development research. AACSU set up a joint commission to establish accountability formats. After considerable time, they issued their report in 1996 (Mortimer, 1996). AASCU has endorsed output measures. They concluded that this was the best way to define and monitor quality. AASCU has produced a technical manual to ensure that all university results are comparable. This is consistent with the steps taken by AECD. Implementation commenced in 1997 and discussions about the trial are ongoing.

According to Departmental officials AECD also closely monitored changes to university funding mechanisms reporting in Europe, Australia, and New Zealand. The different demographic and economic trends in those areas prompted reforms earlier than in Canada. Close attention was also paid to established performance measurement and reporting initiatives in the United States. The programs in Colorado, Minnesota, Tennessee, Texas, Virginia, and Washington states were all considered by AECD.

AECD learned from each of the described projects. Accountability systems present common difficulties. Performance measures direct management attention to specific areas. If attention is misdirected, the quality of education will decline. The challenge is to provide appropriately motivating information. Generation of information that is useful to educators and students alike requires intense commitment. It is hard to get enough support in corporate structures to achieve these goals. Gaining the co-operation of educational institutions is even more difficult than in the corporate context. Educational institutions are largely autonomous and many groups have significant influence in the decision-making process. AECD proceeded to respond to the government accountability initiatives with these difficulties in mind.

Accountability Policy in AECD

In this section of the chapter the second research question, **"What was the impact of government policy on AECD policy"**, is discussed. Policy development within AECD is deeply influenced by the government and developments in other jurisdictions. As noted in the previous section AECD did a thorough job of monitoring developments in other jurisdictions. This enabled the Department to explore accountability reporting with post-secondary institutions before the government started formalising its plans. The Department also noted closely the political environment facing the government. Unlike other departments, AECD started development of its first policy document, *Accountability Expectations,* during the development of the *Simpson Report*. Policy development at AECD progressed in step with the development of government policy, so this section is divided into the same three categories used to outline the development of the government's accountability policy.

Policy development was influenced by changes made to the Department by the government. Soon after the June 15, 1993 election, the Minister of the Department of Advanced Education made several important structural changes. Jack Ady, then Minister, amalgamated the Department of Advanced Education with the Department of Career Development. This brought all post-secondary training and programmes under one Deputy Minister. There was an obvious efficiency gain from this move. The Deputy Minister had worked in the Treasury Department prior to coming to Advanced Education. I was told the Deputy Minister was therefore well aware of the accountability developments in Treasury and was good at passing onto Department officials initiatives to which they should get ready to respond. One respondent told me "Any deputy worth his or her salt has got her ear to the ground and knows what's coming long before any report gets published." All post-secondary programmes under one official could help ensure a consistent and comprehensive accountability approach.

The Department was fortunate to have in its ranks several professionals with solid credentials with post-secondary institutions. The Assistant Deputy Minister of the System Funding and Accountability Branch at that time had been a respected college administrator. Another official had also been a VP finance of a university and a college in the province before taking on a senior position with AECD. Within the Department, many of the key officials involved in monitoring the post-secondary sector had many years of experience within the Department. The skills and relationships of these people were recognised and used by the Minister in the forming of the KPI project in the summer of 1993.

AECD policy development closely resembled the policy development stages of the Alberta Government. AECD's accountability documents are listed in the following figure:

PROBLEM SENSING (initial stage)	
Accountability Expectation	October – 1993
1994-96 Business Pan	February 1994
A Job Well Done	April – 1994
New Directions	October – 1994
PROBLEM CONCEPTUALISATION (development stage)	
1995-1999 Business Plan	February – 1995
Institutional Accountability	February –1995
PROBLEM SPECIFICATION (policy formalisation)	
A Funding Framework	June – 1995

Figure 4.2. AECD accountability policy documents.

Initial Responses: Problem Sensing

The gentle warning given in the September 1992 proposal to the University Co-ordinating Council executive did not have the desired impact. By the spring of 1993 there were no formal proposals for new performance indicators and accountability measures. Drawing heavily on the work of other jurisdictions and the experience of the senior officials in AECD, the Department took a stronger leadership position. Over the summer direct consultations with post-secondary institutions took place. In October 1993, AECD released its first accountability proposals entitled *Accountability: Expectations of the Public Post-Secondary System: A Discussion Paper* (AECD, 1993). In this discussion paper, the Department stated:

> The entire post-secondary system must take note of a new reality: the public expects accountability. Recognising our (AECD) responsibility as part of this renewed emphasis, the Department is proposing a process that will lead to an agreed-upon statement of results for the system and

> improvements in the way that we demonstrate these results.... In making this proposal we have in mind that the provincial treasurer announced in his 1993 budget that all departments, agencies and organisations receiving significant government funding will be required to have in place a business plan and specific means to measure results and performance. (AECD, 1993, p. 17)

The policy direction was clear and definite with specific expectations for progress. Deadlines for the 1994/95 budget process were now relevant to the discussion process. Yet the report did not dictate the shape of policy formulation or implementation, which reflected the Department's desire to reach agreement.

Unlike the proposal to the University Co-ordinating Council executive, the Department now involved itself directly in the process of improving accountability. Noting the Treasurer's intention to institute business plans for 1994/95, AECD explained, "If for no other reason, the Department's overall responsibility means it must become an active partner with the institutions in defining the purpose, use, and adequacy of measures" (AECD, 1993, p. 2). Even though the Department had now involved itself, a respectful tone for consultation with the post-secondary institutions was set from the beginning. AECD defined the goal of accountability as a responsibility to do a good job and also to assure the public that a good job is done. *Accountability: Expectations of the Public Post-Secondary System* set out a framework in which the Department wished to undertake its responsibility to improve accountability.

The discussion paper started by acknowledging that "Alberta's post-secondary system has served the province well" (AECD, 1993, p. 1). The report did not dismiss the existing policy and accountability processes. Among the accountability processes acknowledged by the Department are programme evaluation according to the *Guidelines for System Development*, use of advisory committees, board governance, budget and financial reports, reviews by research granting councils, and annual reports. The Department asked the institutions in the post-secondary system to help refresh the focus to show Albertans how the system is staying accessible, affordable, and responsive to learning opportunities. To enhance these long-standing goals, the Department asked for help in designing mechanisms that would demonstrate providers, and therefore the Department, would take their responsibility for system outcomes seriously. The shift from outputs to outcomes was explained as necessary given the limits on overall resources. The paper acknowledged that each institution had a different mandate within the system. Each institution was asked to develop indicators in four categories—learning, research, service, and fiscal management—to help demonstrate the systems accountability and the institution's contribution to the Department's three goals.

Some accountability areas were specifically identified as needing improvement in *Accountability: Expectations of the Public Post-Secondary System.* The Department insisted that agreement on what sorts of outcomes are to be achieved be developed. Consistent accountability data to allow comparison was also noted as a current weakness. Frustration was also expressed over the limited involvement of some institutions in activities to enhance accountability, but the institutions were not named. It was clear from the organisation of the report that the proposed framework for improved accountability was intended to redress the areas needing improvement.

At this stage the Department was not distinguishing between stakeholders:

> The Department believes there is consensus on broad goals for the system. However, the priorities differ as one moves from one "stakeholder" to another. Rather than concern itself with relative priority, this document is concerned with expected results—the results that together would demonstrate that broad goals are being satisfactorily achieved by individual institutions and by the system as a whole. (AECD, 1993, p. 7)

The report went on to explain how the many expected outcomes from the post-secondary system could be shown to be contributing to achievement of the three broad goals of the Department. Expectations were to be reported through measures in five general areas. However, some interesting cautionary notes were included in the proposal. The Department acknowledged that not all outcomes are easily assessed and that agreement about what is a valid and reliable indicator of success is essential. At this point the Department also stressed that both qualitative and quantitative measures were necessary. Because performance is multidimensional, they also indicated that overemphasis on one measure or group of measures would be avoided because that could lead to undesirable changes in other aspects of the system.

In keeping with the accountability theme, the Department included a plan to develop the specifics of the accountability framework. First, a public process was to be held to obtain agreement on the results expected from the system. Once consensus was reached, indicators were to be developed for the system and as required for unique institutional and programme situations. Following agreement on the indicators, data collection and regular publication of results was to commence. I was told the stages were designed to make consensus easier to reach. For instance, the process would ensure that consensus over the importance of employment measurement would not be delayed by fights over how to measure employment rates. No deadlines were set for the stages. However, it was clear that the discussion was not to be about the proposed framework; rather, it was about developing the framework.

Unfortunately, AECD was forced to publish its first three-year business plan in February 1994 for inclusion in the government's *A Better Way* document (AECD, 1994b). Apparently, the Treasury Department imposed decisions on AECD that forced specific decisions before the consultative process with the post-secondary institutions was complete. The 1994/95 budget linked with *A Better Way* imposed an immediate11% funding cut on the Department. Cuts of 7% for 1995/96 and 3% for 1996/97 were announced at the same time. The government imposed or announced its performance expectations of AECD.

The government plan imposed decisions and deadlines on AECD concerning important alternatives under discussion between AECD and post-secondary institutions. Although the goals announced in *Accountability: Expectations of the Public Post-Secondary System* did not change, the emphasis did. First, the Department announced that public consultations would be held without mention of the independent role of educational institutions in the delivery of services. In the area of access, direct funding of specific new programmes was announced without mention of the existing co-operative processes used to allocate resources to specific programmes. This same directness was evident in the plans to achieve the affordability goal of AECD. The plan went beyond setting grant levels and instructed specific cuts to administration, salaries, and capital projects. Most telling was the announcement that the Department would determine measures and expected results to the programme level, thereby abandoning the system-wide approach previously in use. There was also an indication that AECD was now going to collect and publish accountability data directly.

Some of the differences noted between *Accountability: Expectations of the Public Post-Secondary System* and the *Business Plan 1994/95 to 1996/97* can be attributed to the structure in AECD. The strategic planning group responsible for the Department's business plan requirement and the group responsible for the Department's budget were in completely different divisions within the Department than the divisions engaged in the consultation process with the post-secondary institutions. I was also told that the culture of secrecy, which is so important to the careers of those involved in the government's budget process, also played a role in the contradictions. One understanding respondent put it this way:

> One reason why that finance part of the Department probably wasn't very consultative, is that, in the history of that branch, they were a part of the Department worried about preparing the Department's budget, and they were influenced by the same values as Treasury. You don't talk with anyone about anything associated with budget preparations and that is absolutely prohibited. People lose their jobs: people just get summarily fired for talking to anyone outside of their office about budget related matters.

Nonetheless the contradiction was frustrating as noted by another respondent as follows:

> They were really looking at separate data collection, separate definitions, and that was really quite onerous on the institutions as well as very annoying to tell you the truth.....as time went by the penny dropped. Once the notion came up then the whole idea of rationalising and what we are doing in KPIs to what is appearing in CIS became a big deal. We had to rework ... quite drastically.

However it came about, all of the announcements in the *Business Plan 1994/95 to 1996-97* had an impact on everyone involved in the consultation process. The nuances of who was involved hardly mattered. It is therefore not surprising that universities responded with concern about the government's approaches to the processes underway between AECD and the post-secondary institutions.

Following the release of the *Accountability: Expectations of the Public Post-Secondary System* discussion paper, efforts began to develop the ideas further. The release of the *Business Plan 1994/95 to 1996/97* added much intensity to the efforts. Universities took the work very seriously and after internal discussions and meetings with the Department, they moved the accountability process forward by releasing a formal response entitled *Doing a Good Job and a Job Well Done: Aspects of Accountability in Alberta's Universities (UCC, 1994)*. Unfortunately, much of the report seemed to be an attempt to take the process back to the themes in the Department's 1992 proposal of the University Co-ordinating Council, *Performance*

Indicators and Accountability Measures. Concerns about the danger of inappropriate uses of the proposed indicators featured highly in the report. Discussing accountability, the universities state:

> We need to come to a common agreement on basic issues. First of all, we must have a shared vision and common goals. We must understand *why* we are measuring before we embark on *what* to measure. Furthermore, we must be able to trust that when we do measure we agree to use the results in the best interests of the system. (UCC, 1994, p. 4)

The universities proposed an alternative framework to the one proposed in *Accountability Expectations* seemingly ignoring the process the Department had laid out in the proposal. They proposed that the model developed by the Canadian Comprehensive Auditing Foundation for the post-secondary system in British Columbia be adopted. That model provided a broad set of eight questions concerning the full range of outputs a university provides to society. The report concluded with a explanation of the existing performance indicators of outcomes already provided to AECD and a commitment to evaluate how these measures could be used to give visibility to AECD goals of accessibility, affordability, and responsiveness.

On the surface the report is co-operative and signals a cordial discussion between the Department and the institutions, but this is not completely the case. The universities committed themselves to an active process to develop the accountability ideas put forward by the Department. It took only six months from the release of the *Business Plan 1994/95 to 1996/97* for all four universities to agree on this detailed response. Their commitment came with a clear reservation:

> It follows that we have made choices about the amount and type of resources that flow to our programmes. In that regard, it is imperative that we recognise and be sensitive to the balance between accountability and autonomy as those factors influence outcome measures we select. (UCC, 1994, p. 4)

The comments attempt to take the discussion back to a governance model of accountability that had been part of the proposal to the University Co-ordinating Council executive in 1992. However, the intervening events, notably the *Business Plan 1994/95 to 1996/97,* moved the Department past this and as a result tension now existed between Department intentions and the desires of the universities. However, I was told the offsetting effect was an understanding that the Department was an advocate for the system to government and that government was imposing strict expectations on the Department.

In 1993 the Department embarked on a strategic planning process about future needs in the post-secondary system. On the basis of a white paper entitled *Adult Learning: Access Through Innovation* (AECD, 1993b), extensive public consultation occurred. With the budget reductions and emphasis on access in the Department's accountability paper, this process was altered early in 1994. In keeping with the announcements in the *Business Plan 1994/95 to 1996/97*, an overall policy framework was to be developed. Another white paper, *An Agenda For Change* (AECD, 1994c), was issued that united the accountability and strategic processes. This paper brought together the two consultation processes, involved over 7,000 Albertans, and resulted in the issuance of a new policy document late in 1994 (Andrews, Holdaway, & Mowat, 1997).

New Directions for Adult Learning in Alberta was issued in October 1994 as a policy white paper, and as such it is a central expression of the Department's policy intentions. The timing of the report is significant, coming right after the government issued *Beyond the Bottom Line*. It was also clear that the name of the report was influenced by the government because several Departments released policy documents starting with "New Directions" at roughly the same time. The Minister prefaced the plan with the following acknowledgement:

> New Directions For Adult Learning in Alberta sets out 22 strategies to help achieve four goals of increased accessibility, improved responsiveness, greater affordability and more accountability. These strategies were developed in consultation with Albertans and will require co-operation, commitment and new partnerships in order to be successfully implemented. (AECD, 1994, p. 2)

Although the same systems goals are present, the structure, content, and tone of the recommendations is very different from the materials found in the *Business Plan 1994/95 to 1996/97.*

Through the discussions leading to the preparation of *New Directions,* AECD separated its internal processes from the government accountability processes. AECD was no longer closely following the language and format of the government's expectation of the Department for its three core businesses. In *New Directions,* the

Department established its own strategies for achieving its mandate in partnership with its own stakeholders.

Two examples are presented here to illustrate the change.

(1)The business plan indicated that AECD would "collect performance data relevant to service providers and programs, and publish results" (AECD, 1994b, p. 13). The plan indicated that it was the Department's responsibility to provide leadership through this process. In *New Directions*, responsibility became "require providers to measure and report on performance through an accountability framework to advise Albertans of results in publicly funded learning opportunities" (AECD, 1994a, p. 17). The explanation of the change emphasised a shift away from meeting with Albertans to discuss accountability to an indication that the Department would work with post-secondary institutions to enhance current accountability reports and help them to develop additional indicators.

(2) The *Business Plan 1994/95 to 1996/97* instructed institutions to "reduce the cost of salaries and benefits by 5%" (AECD, 1994b, p. 5) to improve affordability in the system. This was replaced in *New Directions* with a strategy to "hold institutional boards accountable for revising collective agreements to meet changing economic circumstances" (AECD, 1994a, p. 16). The discussion of this strategy indicated that AECD will insist that institutions maintain their ability to focus their expenditures on areas of current and future need, and to move away from provisions and structures that trap the institutions into yesterday's programmes. The Department left how to do this up to the post-secondary institutions.

Three important accountability directions were clarified in the *New Directions* paper. First, the Department announced it would work with institutions to gather the information needed to develop a comprehensive plan to ensure accessibility for the large increase in students leaving high school between 1998 and 2005. The Access Fund announced in the 1994/95 budget was now explained as a way for the Department and institutions to learn which innovations would best provide new education spaces rather than have the Access Fund become a permanent source of performance funding. Second, the Department announced it was establishing a new funding mechanism to reward performance and productivity of post-secondary institutions. However, this was not to go into effect in 1996/97, so a process of consultation could occur and the necessary data collection could be completed.

Third, the Department announced it would "require providers to measure and report on performance through an accountability framework" (AECD, 1994a, p.17). The Department indicated it would work with public institutions to develop the framework that would include expected results and a core set of qualitative and quantitative performance indicators designed to evaluate how well institutions were progressing toward the expected results.

New Directions brought the policy discussion back to the pattern of consultation evident before the government issued *A Better Way*. The Department reacted quickly and, in some cases, in advance of the government. The Department's acceptance of the constraints imposed by the government's accountability process was evident from the preceding discussion. Although the Department was reacting to a similar policy problem in what Dunn (1981) refers to as the problem conceptualisation stage, differences occurred. With the issuance of *New Directions*, the Department was explaining how the Alberta Government's accountability policy process would be integrated into the existing operations of the Department.

Problem Conceptualisation: Specific Accountability Proposals

New Directions became the focal point for the Department's plans. Immediately following its release, the Department had to consult with the government concerning the December 1994 draft of *Measuring Up* that was eventually released by the government in June 1995. There was little time to develop the plans needed to act on the initiatives announced in *New Directions*. Revisions to the three-year business plan had to be in place for inclusion in *A Better Way II* by February 1995. In addition to producing the *Business Plan 1995/96 to 1997/98*, AECD clarified the accountability proposals in *New Directions* through a progress report, *Institutional Accountability In Alberta's Post-Secondary System*.

The *Business Plan 1995/96 to 1997/98* must be understood in the context of the Provincial Treasurer's expectations. According to the Treasurer:

> The biggest success of the business plan process to date is that the plans have guided the action of Departments and the decisions of government. They have not become "shelf liners"... set aside and forgotten. Instead, the plans have been rethought, modified and changed to respond to changing circumstances and needs. Overall, the direction and key themes for change remain the same. 1994 was a year of major change—and that trend will continue in 1995. This year will be the year of transition... a turning point...the year we move beyond a focus on

> dollars and cents to a focus on securing the future. (Alberta Treasurer, 1995, p. 1)

A Better Way II implemented the move from five core businesses to three: people, prosperity and preservation, which to a large extent cut across Departments. Departments are presented as agencies that compete with the private sector and each other for the funds and mandate to carry out programmes seen as necessary by the Government of Alberta. AECD was singled out in *A Better Way II* as a positive example for the strategic process that had resulted in *New Directions*.

The organisation of the *Business Plan 1995/96 to 1997/98* was changed substantially to reflect the accountability ideas developed in *New Directions*. The report started with an explanation of the goals of the Department followed by a repetition of the vision statement from *New Directions*. The Department dropped the mandate section from the new plan and replaced it with a more detailed description of the Department's mission. The spending targets for 1995/96 and future years remained consistent with the 1994/95 plan. Together, these changes clarified and reinforced the new policy directions. While the strategies changed substantially, accountability remained a stated goal in the *Business Plan 1995-96 to 1997-98*.

An example of the shift in strategy relates to ensuring the quality of programmes offered in the post-secondary education system. In the first plan AECD said that they would "collect performance data relevant to service providers and programs, and publish results" and "monitor the performance of the adult learning system to ensure that its overall accomplishments contributed to broad government economic goals identified in *"Seizing Opportunity"* and other relevant documents" (AECD, 1994b, p. 13). This declaration changed to one where they would "ensure that providers of learning opportunities have met appropriate standards of quality to protect the learner" (AECD, 1995b, p. 16). The goal for development of a policy framework was dropped as *New Directions* fulfilled that requirement. In its place a goal to improve Departmental efficiency was added. The Department explained that it wished to remove legislative and regulatory barriers to system responsiveness and that it would monitor and publish additional measures concerning the Department's performance. The changes in strategy are completely consistent with the directions set out five months earlier in *New Directions*.

The *Business Plan 1995/96 to 1997/98* included a new table that reflected the impact of government policy on AECD. Each of the government's key performance indicators related to AECD were listed and related to the Department's goals. I was told that this chart originated from discussions between the Department and government treasury officials. As both an agent of the government and an advocate for post-secondary institutions to government, AECD wanted to preserve the processes in place with the post-secondary sector. The table emerged as a way to demonstrate how the Department was responding to the government's policy. Because it was accepted for inclusion in *A Better Way II*, it was also an important sign of the freedom the Department had. Taken along with the Department's renewed signal that the post-secondary institutions would play an important role in shaping their own accountability reports about how they fulfilled their own mandates and goals, the existence of an operating chain of policy-independent implementing agencies is evident.

At about the same time as the *Business Plan 1995/96 to 1997/98* came out, the Department also published *Institutional Accountability in Alberta's Post-Secondary System: A Progress Report.* (AECD, 1995c) The report had two purposes. First, it provided a more detailed explanation and assessment of the current accountability processes. Second, the report explained the nature of the new Department initiatives underway to meet the Department's accountability goals. This report went further than any previous report in explaining the accountability processes that already existed. The necessary and desirable independence of the institutions as delivery agents contributing to system goals was emphasised.

Institutional Accountability contains a positive description and explanation of accountability features that were already a part of post-secondary institutional practices. The list starts with mandate statements, development plans, and business plans worked out with the Minister under the *Guidelines for System Development* policy. (AECD 1989) The list also included programme approval processes, board of governors' responsibility, advisory committees, professional accreditation, granting councils, financial statements, the Alberta Council on Admissions and Transfer, and graduate surveys. These items were now formally and firmly included in the information provided to Albertans to help them evaluate the success of the system.

In this report, AECD presents both the institutions and themselves as separate stakeholders in the reporting process for the first time.

The weaknesses of the current accountability processes were presented as justification for additional accountability procedures. The overriding concern about the existing practices was "that most of these measures focus on what resources are going into the system rather than on the results" (AECD, 1995c, p. 5). Again, the report continues to recognise the efforts of the institutions. However, the inability to make systematic comparisons between institutions down to the programme level because of inconsistencies in methodology offsets the recognition. The Department indicated that its key performance indicator initiative would address the noted weaknesses. Great effort was taken to ensure that the concerns about KPIs expressed in *A Job Well Done* were visibly addressed in two ways. First, the Department made a public commitment that KPIs would not be the only basis used to determine quality and efficiency. Second, the Department encouraged the development of KPIs for institutional purposes. The second commitment clarified that the AECD KPIs were required in order to fulfil its mandate regarding the system and that AECD encouraged institutions to go further to show how they were fulfilling their own particular mandates.

The report *Institutional Accountability* concludes with a description of four initiatives that the Department had underway and would continue to pursue to achieve that level of desired accountability. First, the Department announced an information reporting and exchange project to streamline and standardise information currently going into the Financial Information Reporting System (FIRS) and the Common Information System (CIS), so that it would support the desired level of information comparison between post-secondary institutions. Second, the Department would continue to work with institutions to gain agreement about a common set of key performance indicators. Third, a benchmarking project would be set up so that institutional performance could be fairly compared to results in other jurisdictions. Fourth, a new funding framework would be developed that was to be tied into the new accountability framework.

All four accountability initiatives were underway in the separate branches within AECD historically associated with these activities. Although this made sense in AECD, co-ordination was lacking, which resulted in development problems that are discussed in chapter 6. Board governance of post-secondary institutions gives them more decision-making independence from AECD than AECD has from the government. In terms of the Mazmanian and Sabatier model, AECD could not go any further than it had to align the variables affecting implementation. AECD had less statutory ability to structure implementation of the accountability policy than had the government. As a result, the problem specification and the formalisation of policy initiatives in AECD diverted from the government pattern as 1995 progressed. Rather than issuing standards, AECD started producing policy outputs consistent with the accountability framework to encourage compliance. To clarify and co-ordinate the relationships between the initiatives and add some financial incentive for the institutions, a detailed paper called *A Funding Framework of Alberta Post-Secondary Education* was issued in June 1995.

A Funding Framework was a detailed document designed to stimulate implementation of the accountability framework:

> This document is designed to inform the continuing consultative process. ...The central question addressed by this process is how best to relate institutional funding and accountability to performance measured in agreed ways....Our response to the central question, at this stage in the consultative process, is a flexible framework for a possible funding mechanism which continues the block grant approach, based on three year Department and institutional plans, and which responds to special circumstances, as they arise, with envelope funding such as the Access Fund. (AECD, 1995a, p. 1)

The depth of explanation is an indication of the seriousness assigned to moving implementation forward. The Department also exercised its strongest statutory tool, allocation of funding. *A Funding Framework* was released just after *Measuring Up* and so it became associated with government intentions to allocate funding on the basis of demonstrated results. Each of these factors provided a compelling atmosphere for post-secondary institutions to make rigorous implementation responses.

Commentary

A strong link was made between the accountability initiatives and I was told this was widely regarded as an essential prerequisite for co-operation from the post-secondary institutions. Defining common terms and enhancing the Financial Information Reporting System (FIRS) and Common Information System (CIS) was necessary so that performance funding decisions could be made consistently and efficiently. The Department announced 15 sets of system performance measures to activate performance funding and monitor outputs in relation to the four goals established for the system. To ensure the validity of system-wide comparisons, the KPI project also needed to ensure that common definitions were used—for example, which items and allocations would be included in programme costs. The benchmarking initiative was needed so that judgements could be made about the information generated from FIRS and the KPIs. The funding framework would rely on the information provided by the other initiatives and would itself provide motivation to co-operate because of the financial consequences attached to the outcomes. The funding framework was also designed to provide the financial mechanism to respond rapidly to special needs and problems as they were identified.

The concerns about the use of KPIs were not forgotten even though the Department was making a strong move toward implementation of the accountability framework. AECD stated, "In any complex system, new inputs may induce activities and outcomes beyond those sought or perhaps even desired" (AECD, 1995a, p. 31). I learned that this caution was seen differently by the Department than the post-secondary institutions. To address the caution, base funding was continued. Performance funding was to be initiated through five envelopes, each of which was not to become more than 5% of an institution's funding. The envelopes were labelled Performance, Accessibility, Capital Investment, Learning and Technology, and Research. Initial efforts were to focus on the performance and accessibility envelopes.

The impact of the government policy on AECD and how AECD developed its KPIs was summarised through the discussion about accountability included in *A Funding Framework.*

> Publicly supported institutions must serve the public interest. It is the responsibility of the governments to ensure that educational policies are adjusted to meet changing needs, and further, that recipients of public funds are accountable. This means more visibility and information to the public, and evidence that the post-secondary system is prepared to examine the way it is organized and operates, that it has the capacity to innovate and respond to those served, and that it delivers high quality services in an efficient manner. Communicating goals and mandates, expected results and making these expectations public ensures that legislators and the public are in a position to comment knowledgeably

> about and assess performance. Effective accountability means that those who managing public resources depend on sound information not speculation. It is imperative that accountability information be understandable, relevant, reliable and comparable. Greater openness will encourage better understanding and, in turn, greater support. (AECD, 1995a, p. 13)

Further to this, the document stated:

> Effective accountability presupposes consensus on the functions, priorities, activities and resources for which institutions may be called to account. Ministers are responsible for articulating expectations to boards, and board members exercise accountability by reviewing, approving and monitoring the implementation of business plans and budgets, establishing goals for their organisations, and selecting performance measures and indicators for reporting results. In this way accountability can remove the need for bureaucratic controls and promote proper balance between coordination and autonomy. (AECD, 1995a, p. 14)

According to the Mazmanian and Sabatier model, the development of policy outputs by AECD such as those presented in *A Funding Framework* were expected. Describing the KPI project as a way of increasing independence through less bureaucratic regulation shows how the Department's respect for the system resurfaced, even though such strong change had been imposed by the government.

Summary

This chapter described how the Alberta Government accountability policy was developed and the impact of the Alberta Government's policy on AECD. The development of the Alberta Government's policy was consistent with the normal stages of policy development problem sensing, conceptualisation and policy specification. Government policy had an almost immediate impact on AECD. The impacts included several interrelated accountability initiatives including the KPI project that impacted on all aspects of AECD's interactions with post-secondary institutions.

Chapter Five

Implementation Developments

Chapter 5 addresses research questions three, **"How did AECD developed its KPIs,"** and research question four, **"What outcomes did AECD expect from the introduction of KPIs."** The chapter is divided into four sections: AECD KPI project, benchmarking project, Access Fund, and accountability reporting. In tracing and reporting the origin of these accountability initiatives in chapter 4, the significance of the division of responsibility between different branches for the initiatives became clear. As a result, I have traced the development of each of the initiatives separately in this chapter. Each of the initiatives merits consideration because they are essential to the accountability project and related use of KPIs.

General agreement with the universities on a specific set of key performance indicators was announced in February 1995 in conjunction with *Institutional Accountability in Alberta's Post-Secondary System*. The announcement was the first public indication of the KPIs that AECD and the institutions would be developing. A lot of work preceded this announcement. In chapter 5 the emphasis was on policy development and the implementation of policy responses by AECD. The time period covered by chapter 6 overlaps with chapter 5 to explain the origins of the KPI development process.

Each initiative described in this chapter is a policy output of AECD as an implementing agency of the government. In terms of Mazmanian and Sabatier's model, which was presented in Figure 3.1, I am tracing the stages (dependent variables) of the implementation process. The benchmarking, Access Fund, and accountability reporting initiatives were included because I was told they were critical to the development and the justification of the KPI initiative within AECD. The investigation revealed important insights into the impacts that AECD expected and the reactions of the university sector.

AECD KPI Project

There are very few public documents about the development of the Department's KPIs. Legislation required and set a policy expectation that KPIs would be developed. This reduced the need for discussion papers evident in the other accountability initiatives. Responsibility for the KPI project rested with the systems branch within AECD. Because there was such a strong initial implementation model, the branch started directly with operational developments. Fortunately, my practicum term was served with the KPI team and gave me access to public but unpublished documents, records, and processes that I could not have considered from published documents and selected expert interviews alone. Figure 5.1 outlines the timing of important project documents.

POLICY DOCUMENTS	
New Directions	October – 1994
Accountability: Expectations of the Public Post-secondary System	October – 1993
Institutional Accountability	February - 1995
INTERMEDIATE REPORTING MANUALS	
Key Performance Indicators Reporting Manual for Alberta Colleges and Technical Institutes	September – 1995
Key Performance Indicators Reporting Manual for Alberta Universities	June – 1995
Key Performance Indicators Reporting Manual for Alberta Colleges and Technical Institutes.	May – 1996
Key Performance Indicators Reporting Manual for Alberta Universities.	June - 1996
Key Performance Indicators Reporting Manual for Alberta Colleges and Technical Institutes.	November – 1996
Alberta Universities Key Performance Indicators Reporting Manual.	December - 1996
FINAL REPORTING STANDARDS	
Key Performance Indicators Reporting Manual	November – 1997
Financial Information Reporting System	November – 1997
Common Terminology, Definitions and Classifications	December - 1997

Figure 5.1. Development of system-wide KPIs.

In the eyes of the systems branch, the benefits of KPIs could be obtained by following the operational pattern that emerged out of Dr. Smith's accountability study, other post-secondary literature, and the popular *Reinventing Government:*

> This pattern—adoption of crude performance measures, followed by protest and pressure to improve the measures, followed by the development of more sophisticated measures—is common whenever performance is measured. It explains why so many public organisations have discovered that even a poor start is better than no start, and even crude measures are better than no measures. All organisations make

> mistakes at first. But, over time, they are usually forced to correct them. (Osborne & Gaebler, 1992, p.156)

It is evident even in the 1992 proposal to the University Co-ordinating Council that the Department had embraced KPIs as an ongoing development process. This approach was widely accepted by the time the Department's first accountability policy paper was released in October 1993. "To be fully accountable, key measures of performance—quantitative and qualitative—must be made public and integrated into a process of continuous improvement" (AECD, 1993a, p.3). This attitude permeates all aspects to the KPI project.

Accountability: Expectations of the Public Post-secondary System, was described in chapter 4 and set out the stages that the Department would follow to develop performance measures for the "new reality." The Department indicated progress toward the system objectives of responsiveness, accessibility, and affordability would be measured and monitored by measuring results in five categories. The categories were learning, research, community service, fiscal management, and accountability. A three-stage development process was envisioned rather than a rigid development schedule. Discussion was to first centre on expected results, followed by joint development of the measures for those expected results, and finally data would be collected, processed, and published. Discussions about the proposal with institutions and other related groups such as the Alberta Confederation of Faculty Associations brought many concerns to light. To its credit, the Department learned from the feedback and demonstrated the continuous improvement it wanted to encourage in the system by adjusting the process.

A letter to all college and university presidents formally kicked off the KPI project in November 1993. The Deputy Minister asked the presidents to form working groups to participate in the development of KPIs. The colleges welcomed this because their Council of Presidents had already formed such a group on their own initiative. Alberta's universities did not have a pre-established group, so the college sector initially led the process. By January of 1994 the Department was engaged in the first round of discussions with the college group. After learning from the initial feedback, AECD now included four stages in its development plan. Joint agreement about what to measure would occur first. During the second step, potential measures would be evaluated and selections made. Developing a test batch of data would be the third stage to confirm the feasibility of the measures. Once everyone was satisfied the fourth stage, a test year would begin. By keeping each stage separate, AECD helped to maintain a productive discussion about one set of problems and issues at a time (Orton, 1996). The willingness of the college group to embrace the AECD initiative got the project off to a very fast start.

Stage One

Discussions got underway with sectoral groups by establishing a set of measurement goals. Four common goals quickly emerged. The first goal was consistency and comparability within and across sectors. The second goal was comparison down to the programme level because funding is awarded on that basis. The third goal was to ensure results would be published as the Department wanted to be seen increasing public access to information. And finally, AECD wanted a focus on outcome measures (Orton, 1997). With these basic goals established, the subgroups began their work on specific measurement areas such as learning in earnest in the spring and summer of 1994.

A great deal of respect characterised the discussions at this point. By focusing on outputs, I was told the institutions did not feel as though the Department was intruding on their autonomy by interfering with how they select and manage inputs and processes. Difficult measurement compromises were seen as desirable so that reasonably fair comparisons could be made (Orton,1997). Discussion of actual measures was a constant temptation and obstacle to progress, so the Department became a firm facilitator. The Department had an uncompromising commitment to its goals and the independent achievements of the institutions by frequently repeating that the system served the province well (AECD, 1993a). "The expectations outlined in this paper are to be used as the starting point for discussions with post-secondary institutions to develop reliable and valid indicators to demonstrate success" (AECD, 1993a, p.2). This respect is an important characteristic of AECD because KPI projects in other jurisdictions have floundered as a result of mistrust.

Although participants raised many concerns about the KPI approach, a reasonable degree of agreement emerged about what to measure. The Department had to work at keeping discussions away from specific measures and internal institutional goals. Slowly the contribution of each institution toward desired public outcomes came into focus. Stage 1 ended in October 1994 with a letter to the Deputy Minister from the Universities Co-ordinating Council outlining the general measurement areas. This was concurrent with the publication of the policy document *New Directions,* which clarified the meaning of accessibility, responsiveness, affordability, and accountability. The Minister confirmed the importance of the project as an accountability initiative. No comprehensive list of the participants in the first stage existed because group structures remained fluid to address issues as they arose. At least 50 Department and institutional officials were directly involved in making substantial contributions to the process.

Stage Two

Starting in the fall of 1994, the sectoral and performance area groups worked on developing and evaluating measures. The effort was intense, as evident from the significant amount of electronic mail, minuted meetings, and technical proposals that the ministry and institutions showed me. Many indicators were proposed for each area and, through discussion, common values emerged. Some suggested indicators came from the Department. For example, there was reluctance to measure faculty workload but the Department's public perspective ensured this contentious issue was addressed. One respondent observed how serious the Department was that public interest in workloads be reflected in the outcomes of the KPI project in the following way.

> Lynn Duncan said they (AECD) cannot go to Treasury, the caucus and just simply say the system is good and working well and the rest. They felt they had to have something that fit with the general conservative thinking about business plans and accountability and the general suspicion I think that sits within conservative regimes, small c and big c wherever that we're always being ripped off by lazy no good nothings and there's so much waste in the system and if we don't want to get at that we'll be a whole lot better..... It plays well to the public.

As time passed, it was evident that a desire for detail had to be balanced with simplicity to ensure results would be readily understood. To consolidate their progress, the University Co-ordinating Committee released *A Report on Performance Indicators* in July 1995. This report gave descriptions of the indicators where agreement had been reached.

The Department was disciplined about proceeding with the agreed upon development plan. Reflecting on this stage at the 1997 Canadian Ministers of Education Conference the Director of the KPI project made these comments about the importance and success of the process:

> 1. Consultation: Time was spent with committees in each sector. Emphasis was placed on good communications. Electronic communications were used to bring people together across programmes and institutions.
>
> 2. Institutional commitment: The colleges had committed resources to development of KPIs prior to the governmental KPI project.
>
> 3. Process: The project was split into distinct and manageable steps. Energy was committed to only one set of problems at a time.
>
> 4. Time: Firm but reasonable time frames were established for each stage to establish momentum.
>
> 5. Ownership: The Department took a facilitator role. The PSIs kept ownership of the discussions.
>
> 6. Existing database: The Common Information System (CIS) was used to gather data. Demands on PSIs to develop duplicate reports for AECD were limited.
>
> 7. Funding: A loose but certain link to funding was established from the beginning. Self-interest therefore provided motivation, particularly when the discussions became difficult.
>
> 8. Pilot year: Experimentation was an active concept. Various measurement approaches could be suggested and tried without undue financial risk. (Orton, 1997, p.2-3)

It was clear from the comments in *A Report on Performance Indicators* that the committee was aware of the process and how things would emerge.

> Discovering and understanding what universities are doing to make a difference in their communities and finding better ways to communicate about value-added results and impacts are ongoing challenges that require continuing attention and response. (UCC, 1995, p. 37)

However, an apparent gap existed between mandate of the committee in the eyes of the Department and the universities.

> Alberta Advanced Education and Career Development and the four universities agree that a 'pilot phase' should be initiated as soon as this report has been endorsed. (UCC, 1995, p. 37)

The Department appeared to regard the committee to represent the university sector. Much of the technical work now shifted to the Department to convert this report into a manual to guide the KPI reporting process.

The first reporting manuals were published in September 1995 (AECD, 1995e&f). The Minister encouraged the process and kept the focus on accountability through comments about the emerging measures:

> In these sessions participants discussed whether the measures being used were the right ones, how measures could be used to improve services to students and which institutional performance indicators should be considered when the Department makes funding decisions. Generally there was a fair degree of concern regarding key performance indicators and divergent opinions on their usefulness. Some participants felt that the extensive use of KPIs was Departmental micro management at its worst. Others embraced the notion of KPI's and comments that the Department and public institutions will be better positioned to develop policy, take actions and improve performance based on results. (AECD, 1996e, p. 5)

Attention now shifted to Stage 3 and the pilot phase.

Stage Three

The institutions had until December 1995 to provide KPI data for 1994/95. The September 1995 reporting manual indicated a sample KPI report would be out in February and the data for some indicators would be linked to the performance envelope. The financial link raised the pilot phase's importance and it was not long before many unanticipated technical issues arose from both financial and institutional studies departments arose. It became clear that basic financial definitions in the key performance reporting system, the common information system, and the financial reporting system did not align. Institutions had to rework basic data three times to comply with each systems input standards. In response, the AECD upgraded the mandate of the systems group to accelerate the information reporting and exchange project to eliminate duplication. By February 1996 data issues had not been resolved and so a summary of all the problems and proposed solutions was circulated for discussion.

The pace of discussion was accelerated by Internet list servers set up by the University of Lethbridge and Grant MacEwan Community College for their respective sectors. A system-wide discussion about issues and questions arising at each institution developed. The Department monitored the discussions and rarely intervened in the process; it intervened only when equally desirable or mutually exclusive solutions arose. The list servers supported the institutions' ownership of the development process and the Department's facilitator role. List servers also provide a record of the mostly co-operative group process.

Formal meetings were held directly with institutional representatives in March 1996. Participants agreed to a second pilot phase. Many of the issues, such as cost allocation and graduate counting, required an intense effort and many compromises. The Department worked rigorously with institutional contacts to produce a second pilot reporting manual in May to June 1996 (AECD, 1995a&b). The new manuals improved the typical reporting process and provided new deadlines. However, the new schedule meant institutions would be getting 1996/97 results late in 1997, so it would be almost impossible to modify their operations to address any funding concerns. The number of KPIs was reduced from 15 to 13. Some of the indicators and titles changed substantially. Following this revision KPI, definitions were stable for the remainder of the study. Appendix C contains a summary of the indicators.

One benefit of the delay was that the second pilot phase was conducted after *Measuring Up '96* was released. The Department experienced firsthand the risks and scrutiny that follows a KPI report.

Stage Four

Stage 4 commenced with circulation of KPI information resulting from resubmitted 1994/1995 data using the May to June 1996 reporting manuals. Fewer questions arose on the list server, confirming that the improvements were a success. The results were circulated to all institutions so that they could compare and evaluate the results. Further refinements were suggested and audit procedures were set up to validate the competitive concerns of some institutions about the legitimacy of some KPI data. The concerns were taken seriously because the next round of data would be used in the performance envelope. The data collection process came under further criticism, so the information and reporting exchange project was also given more attention. The Department revised the reporting manuals to be used for 1995/1996 data and issued them in December 1996. (AECD,1996c&d) Given the timing, institutions had little time to make operational adjustments in response to weaknesses identified in the pilot study.

The May 1996 manual had called for an annual KPI report. However, the KPI development process was not complete. To make progress, difficult areas had been set aside. These areas included non-credit activities, alternative delivery, and institutional mandates. One respondent described this stage in the following way:

> I think that where a large part of the confusion around the process, certainly my confusion around the process started and continues to date. Because depending on who's at the meeting and who's represented and how the discussion evolves there have been more and more proposed indicators added and it's an open-ended process there's no criteria to draw it to a close (note how this is good).
>
> So I'm not going to sit there and say, Ted, that's a stupid idea (KPI suggestion) or don't do that because it's going to take us this and that to do. In fact the discussion about this and that to do hardly ever emerges at the time the decision has been made to do an indicator a certain way.

Institutions wanted to further refine the measures already developed. Until this was done, I was told they were not willing or prepared to start considering the benchmarking discussions needed to formulate a complete KPI report. The acute concern about sorting out the KPIs is reflected in this respondent's comment:

> I don't know how they are using the program-costing data and that's been one of our complaints all along is what are you going to do with this information we kept saying to them? ....I said with this methodology I can make those numbers anything we want them to be.

In light of this or in consideration of the progress on the performance envelope the planned annual KPI report was temporarily set aside.

The KPI information made an impact even though there was no public report. The Department told me about several operational impacts. In one case, a programme with low student satisfaction used the KPI data to discover the problem was not their subject area. They compared poorly to similar programmes at other institutions and this resulted in a successful programme redesign. In another case, a group of deans used the KPI data to successfully justify changes to an institution's central practices. When I asked about operational impacts, institutions told me they do not make use of the KPI data but illustrated the opposite when we discussed specific measures. In one case, I was told an institution was delegating some centralised functions to deans in response to the administration KPI, and as a result deans gain more direct control over their programmes. Another example was the specific efforts undertaken to ensure programmes are modified to gain access and learning enhancement envelope funding.

Use of the KPIs in the performance report card is described in the benchmarking section of this chapter.

Observations

Discussion and development work continued in 1997. Greater co-ordination of information reporting became possible as the information reporting project was completed. It was now possible to draw much of the information for KPI reporting directly through Common Information System (CIS) and Financial Information Reporting System (FIRS). Special groups were set up to work on the remaining KPI areas. As the KPI project became operational, the role of the UCC committees diminished and at the end of the study period the Department was establishing a new KPI steering committee. In the opinion of the Department, discussions about the measures and starting work on the areas that had been set aside were continuing to clarify performance expectations (Orton, 1997). The new reporting standards and refined definitions were reflected in a common reporting manual issued in November 1997 for 1996/97 and later data collection.

The Department was influenced by the Smith Royal Commission and had adopted the Commission's approach at the start of the KPI project:

> No matter what data or measures are recommended, they could be misleading or inappropriate. The Commission well understands these possible fears and concerns but is absolutely confident that, in the long run, Canadian universities would be much better off adopting these simple measures of public reporting than they would be in waiting for government to operate crudely in the name of accountability, as has happened in other parts of the world. (Smith, 1991, p. 49)

Through co-operation and patience the worst of both situations was being avoided.

The expenditure-related indicators provide an example of the process. The initial KPI manual reflected an institutional desire to demonstrate their investment in teaching, community service, and research. This proved unworkable and negative political reaction was feared. Simpler KPIs were adopted in May 1996 that emphasised instruction, administration, and research. Even though a full-cost principle had been adopted, agreement could not be reached on how to allocate many costs. The universities also wanted to make sure college and university teaching costs were reasonably comparable, so many overhead costs remained unallocated. As a consequence, the University of Calgary Students Union released a paper that accused the University of Calgary of a violation of the 30% tuition cost limit. Comparing the KPI instruction cost to tuition reveals a 46% ratio, whereas total tuition had been compared to total institutional expenditures to determine compliance with the 30% run (UCSU, 1997). The events sparked an auditor general investigation and several professional conduct hearings. The episode also sparked more discussion about definitions and highlighted the fact that more work is necessary to achieve a clear report to communicate accountability information to the public, institutions, students, employers, and the government.

In this section the operation of the independent implementation variables identified by Mazmanian and Sabatier is evident. The Department responded quickly, almost in advance, to the government's KPI initiatives. A process was worked out with the institutions to achieve policy compliance. The project had an impact on AECD operations and institutional decision making even though there is no public KPI report. The Department's KPI report seems to have displaced the need for the institutional report to sustain a perception of progress. The Department perceives that the project is making the system more responsive to Department goals. Although no major revisions of the statute have occurred, the project has undergone substantial refinement and operational refinement has extended development beyond the time frame of this study.

Benchmarking Project

In this section the development of the benchmarking project was traced. There are several significant contradictions in the documents regarding this initiative. Benchmarking was assigned to the finance branch following the decision to include performance funding in the *New Directions* document. The Finance Branch of AECD was responsible for funding institutions. Benchmarks were also under consideration in the KPI project. To proceed with KPI development, the Systems Branch had agreed to defer benchmark development that was needed to evaluate KPI performance. However, pressure from Treasury for performance funding that was noted in the previous chapter continued. The policy revisions that resulted shed light on the implementation process. Figure 5.2 summarises the major benchmarking policy documents.

PRELIMINARY STAGE	
Funding Mechanism Options	February – 1995
A Funding Framework for Alberta Post-Secondary Education	June – 1995
A Proposal for Performance-Based Funding	November - 1995
DEVELOPMENT STAGE	
Defining Performance: Principles of Benchmarking	April – 1996
Benchmarks for Alberta's Post-Secondary System	July – 1996
Encouraging Excellence and Rewarding Success	December - 1996
IMPLEMENTATION STAGE	
New Performance Funding Rewards	July – 1997
Rewarding Progress Towards Goals	July - 1997

Figure 5.2. Development of performance benchmarks.

Preliminary Stage

Benchmarking for performance funding started much later than the KPI project. The KPI initiative had its origins in Departmental proposals in 1992. Interest in building a performance funding mechanism was first announced *Budget '94* in response to Treasury Department directions. In the *Business Plan 1994/95 to 1996/97*, the Department announced the Access Fund as a transition mechanism to reward increases in the overall efficiency and effectiveness of the system. It also produced a visible response to the government's emerging accountability policy. The new funding mechanism would reallocate funding on the basis of productivity and performance. As a funding issue, development was assigned to the finance branch within the Department. Development of KPIs was described in a separate accountability section of the plan.

Performance funding was therefore added to the strategic consultation process that was already underway. *New Directions*, issued in October 1994, clarified Departmental intentions:

> The Department will consult with learners and providers of learning opportunities to develop a mechanism based on service and benefits to the learner. As part of the development of this mechanism, expected results must be determined, indicators of performance developed, and

> performance data defined and collected. The Department has initiated projects to develop common information reporting requirements and definitions in co-operation with institutions, and to develop performance measures at the program level. (AECD, 1994a, p. 16)

In December the Minister followed up with a letter to all institutional board chairs setting a March 1995 deadline for responses. He indicated that sufficient progress on measurement had been made to start a discussion about funding mechanism. Responsibility to respond was not given to the University Co-ordinating Council and related committees working on the KPI process. I was told that the lack of specific proposals in *New Directions* and the limited time available by Department staff meant initial progress was slow.

Development

In February 1995 the Department issued a short paper called *Funding Mechanism Options*. (AECD, 1995g) Competitive reallocation of funding to demonstrate progress toward the four system goals outlined *New Directions* was emphasised. Principles for development were outlined:

> The purpose of a funding mechanism for post-secondary education is to inform traditional government decision making processes which result in the distribution of available resources to institutions and other providers on the basis of current circumstances, including the commitments in *New Directions* as well as the judgements and experience of participants in the process. Such a funding mechanism should reward performance and productivity in publicly supported post-secondary education. (AECD, 1995g, p. 3)

The Minister also announced the appointment of Dr. B. Sheehan to lead the discussion. Dr. Sheehan's appointment was significant because he developed the funding framework implemented in the 1980s and was well respected. Because he was no longer residing in Alberta, he seemed to be impartial. With these announcements, the Minister also demonstrated the Department's flexibility by extending the submission deadline. The implementation date was not changed.

With consultation underway, no new announcements were made in the *Business Plan 1995/96 to 1997/98*. Dr. Sheehan's report, *A Funding Framework for Alberta Post-Secondary Education: Background and Discussion Paper*, was published in June 1995. He proposed the institution's three-year business plans be used to drive the allocation of base operating grants because business plans are based on institutional mandates. In addition, performance-driven funding envelopes would support strategies directed at the Department's four system-wide goals. Envelopes for performance, accessibility, capital investment, learning and technology, and research were proposed. Each envelope would be limited to 5% of the total operating grant. A summary of the feedback from institutions to *Funding Mechanism Options* was included and revealed the process was taken seriously. No specific benchmarking issues were mentioned in this paper, but were evident in institutional concerns.

Consultation continued through the summer and in November 1995 another paper was produced by the Department, *A Proposal for Performance-based Funding: Promoting Excellence in Alberta's Public Adult Learning System*. General agreement with the proposals was indicated and the link to accountability was emphasised:

> By establishing and communicating goals and results, the Department and institutions enable legislators and other Albertans to assess performance in the adult learning system. The proposed funding mechanism goes one step further by rewarding past performance relative to goals and encouraging the improvement of future performance. Funding for future ministry budgets will depend on the ministry's ability to indicate, mainly through performance measures, that we are helping people to be self-reliant, capable and caring and that we are promoting prosperity for Albertans. (AECD, 1995h, p. 14)

More details about the process were provided. Performance envelope funds would come from a 2% reduction in operating grants. The reallocation of operating grants in response to business plans was dropped at this stage in favour of whatever performance-based mechanism was designed. Proposals for the other envelopes were not advanced in this paper except for one feature: the Department noted that the performance envelope would be a reward for past performance. All the other envelopes would be incentives to achieve desirable performance in the future so that an application mechanism would drive their allocation.

A Proposal for Performance-based Funding included the first example of the proposed report card. A description of the elements to be used in the judgement process was included without much detail. Individual improvement, relative performance, best in the system, and achievement of a benchmark that recognised excellence were all included. This was the first step toward making the simple model proposed by Dr. Sheehan operational. The KPI project was going through the same process during this time. I was told that institutions were annoyed that two branches of the Department were independently pushing them to co-operate with measurement development projects. Agreement was reached to align the projects to eliminate the duplication. Perhaps as a reward for visible progress or to recognise the KPI project would only be a pilot in 1996/97, the Minister moved all of the implementation deadlines back one year. The year 1996/97 would be used as a pilot year and the report card would first be used to allocate funding in 1997/98.

As consultations progressed, the Department prepared the *Business Plan 1996/97 to 1998/99* for February 1996. In the business plan, the Department confirmed the changes in the deadlines. It also announced funding for the other envelopes, so work on allocation criteria had to start. However, because the overall Department budget was still declining, the funding came from a reallocation of money within the system. The planning group had ignored recommendations in *A Proposal for Performance-based Funding* to delay implementation and featured the accountability benefits of the envelopes.

In April 1996 the Department consolidated the discussions to date by issuing *Defining Performance: Principles of Benchmarking*. The system was now into the period covered by the pilot year. The focus of this paper was to start delimiting the decision process that would be used to make judgements about performance. Links to the KPI project were now described, but the KPI project was not to the point of developing standards for judgement purposes. Three elements were now proposed for making performance judgements: a goal, a range, and a minimum standard. Goals were to be adjusted for institutional differences in size and demographic settings. Performance was to be judged down to the programme level.

A further step was taken in July 1996 when the Department issued a discussion paper called *Benchmarks for Alberta's Post-Secondary System*. Increased co-ordination between the benchmarking project and the KPI project to activate the performance envelope was evident. "By nature, key performance indicators are goal based. By establishing a benchmark for a particular indicator we set the direction towards which each institution should strive" (AECD, 1996h, p. 2). The discussion paper also reflected the concerns of institutions about reliance on quantitative measures. "Results are best interpreted within an informed context, and specific indicators should not be viewed in isolation but rather within the context of other variables including other performance indicators" (AECD, 1996h, p. 6). It went on to explain interpretation would occur though flexible approaches to the performance ranges set for each performance measure and by adjusting the relative weights for the measures. Contrary to the decision to evaluate performance to the programme level, public report was now to be at an institutional level. The change was made because institutions felt programme level information would result in public misunderstandings.

Another significant development was a move away from automatic reductions in the general operating grant for struggling institutions. "The Department will work with institutions that are experiencing difficulties to develop plans of action to address the difficulties....the overall objective of benchmarking is to further the overall performance of the system" (AECD, 1996h, p.6). The impact of this policy change was significant. The Department was affirming it was more than a government agent to make allocation decisions. It was still an advocate for the system. I was told the Department made it known that it was advocating for more money in discussions with Treasury and that Treasury would only consider requests supported with KPI data from institutions

As 1996 progressed the need for data and firm proposals for use in the 1997/1998 budget became urgent. Ministerial intervention occurred because development of detailed processes was hampered by the increasing number of institutional representatives now wanting changes. For example, several respondents told me that early technical compromises about allocation of overhead costs to programmes made in the KPI process were discovered to contain biases with negative consequences when used to make affordability judgements. Despite these concerns, AECD had to issue a proposal in December 1996 called *Encouraging Excellence and Rewarding Success in Alberta's Public Adult Learning System: A Proposal for Implementing a Performance Funding Envelope*. Even though there were KPI project problems in getting ready to gather data and agreeing on definitions for the measures, the Minister firmly indicated that 1995/1996 data would be used to allocate funding for the 1997/98 budget year. Real confusion also emerged about how much was at stake:

> Beginning in 1997/98, $15,000,000 in new funding will be provided through the envelope. A further $15 million will be distributed in 1998/99. Institutions will also contribute one half of one percent of their operations grants in 1997/98 and 1998/99. It is proposed the each institution would receive a minimum award of 1.5 percent for 1997/98 and 1998/99. (AECD, 1996i, p. 3)

This reduced the contribution from the operating grant and appeared to turn the process into a competition for additional money from the government.

Implementation

Through *Encouraging Excellence and Rewarding Success,* the Department indicated it had selected six KPIs from the KPI project for the performance envelope. In addition, accountability would be assessed by on-time completion of business plans and KPI data. The overall weight assigned to each measure was specified. A corridor approach was adopted, with benchmarks for full, moderate, or no recognition. Both measurement and reporting was now at an institutional level—apparently to redress upsetting measurement problems at the programme level. It was also announced that the Auditor General was involved in assessing and verifying KPI data already submitted. There was no indication on how rewards would be kept within the $15 million limit.

A tight deadline for responses to the specific proposals was set for January 1997. *Encouraging Excellence and Rewarding Success* increased the system-wide emphasis of previous papers. I had the opportunity to attend meetings to discuss the responses. Despite the emphasis on system allocation, serious and thoughtful critiques of the methods were provided from an institutional perspective along with proposals for alternate methods of performance funding. At this stage institutions had access to all the KPI data and it was evident that self-evaluation was taking place. Senior Department officials were clearly annoyed at the lateness of the responses, indicating earlier agreements were taken seriously and reworking was not possible.

Intense discussion continued past March and the first report cards came out in July 1997 under the title *Rewarding Progress Towards Goals.* (AECD, 1997d) Agreement had been reached with the institutions resulting in substantial revision of the report card's contents. I was told the changes came about to maintain public institutional support for the process. Under affordability, KPIs for the cost per FTE and instructional costs were dropped and replaced with administration expenditures and enterprise revenue. The accountability section that rewarded submission of a complete business plan and KPI data was deleted. Comparison with both previous results and a standard to evaluate performance was dropped except for the research measures. Perhaps most noticeable was that the new money disappeared, and the allocation of 2% taken from operating grants was restored. The relative weight between the measures was also adjusted. No explanation was given in the document, but respondents told me a major factor in the adjustments was to limit the rewards to the $15 million available.

The report started with a proclamation that Alberta was the first jurisdiction in Canada to link funding to performance. Throughout the report, visible improvement in accountability was emphasised:

> A performance based approach means Albertans are getting maximum returns on their investment in post-secondary education. Rewarding performance is a part of every successful organisation. Now the same approach is being applied to Alberta's post-secondary institutions....What are the benefits with a performance approach? There are several. The first is continuous improvement. The objective is not to compare or rank institutions but to show areas of strength and areas where improvements can be made in comparison with the benchmarks for each of the four goals. The progress rating shows a high standard of excellence across Alberta's post-secondary system. There are areas for improvement and institutions will be expected to focus on those in the future. (AECD, 1997d, p. 7)

Few performance details were included in the report card. The points awarded and the benchmark levels were indicated for each institution. However, the underlying performance measurements were not provided, so the reader cannot effectively compare institutions. Commentary on the results was included but no rationale was given for the selected benchmarks or point gradients. Therefore, the Minister's perspective sheds light on the way performance funding was pursued. The report card in this case was showing "a good job well done."

The financial impact on institutions was very small. Just 4 of the 21 public institutions received the minimum system reward of 1%. Nine institutions lost 0.25% of their operating grants by earning a 1.75% reward. Eight institutions were awarded 2.5%. No explanation for the operating grant contribution rise from 1.5% to 2.0% was given. The small impact was illustrated by Grant MacEwan Community

College's situation. They got the top award of 2.5%, resulting in an impressive $605,985 award. Taking into account their 2% contribution, the net change is about $100,000. If they had received the minimum system award of 1%, their $24 million operating grant would have declined by about $250,000. I was told the small reallocation effect reduced the institutions risk and concern about the performance fund.

My respondents did not have consistent views about the impact of the payment. One respondent, in the context of our discussion about funding, felt the impact was significant and said:

> We've had comments from Dean's of faculties directly to us saying that they used the data and the introduction of KPIs is having an extraordinary good impact on their institutions. Making them rethinking policies that they had in place and giving Deans whom have wanted to change policies the grounds for raising them again and actually doing something about them.

However, another respondent was quite cynical as evidenced in the following comment:

> In some ways its all smoke and mirrors and back to my earlier comment it's smoke and mirrors in a sense that Ralph Klein can stand up there and say see you know they're all performing well and they're all getting money because of their own performance and he's going to make darn sure that we're still getting our fair share and your right they'll probably change the benchmark or change the methodologies or whatever if one of the universities was severely at a disadvantage.

All the respondents made it clear the payments were closely followed regardless of their views.

The minimal financial impact did not factor into the Minister's news release that came out with *Rewarding Progress Towards Goals*. "Today's announcement marks the first allocation of funding from the performance envelope and the first time in Canada that funding for post-secondary institutions has been linked to measurable performance" (AECD, 1997e, p. 2). He did not specify the reward levels, only the amount of money rewarded. Readers might assume that the University of Alberta, which was awarded $4,149,000, performed better than the University of Calgary, which was awarded $3,466,766. The Minister never mentions the University of Alberta earned a lower score than the University of Calgary. The University of Alberta's award was larger because its base operating grant was higher. He did note that the largest reason for the differences in the amount rewarded was enrolment. In fact, my analysis revealed that if the enrolment indicator was the sole allocation criterion, the reward allocation would be virtually the same. Ironically, enrolment had been a primary factor in previous operating grant adjustments. The Minister repeated his commitment to use the same report card for 1998/99 but to have another round of discussions before making adjustments for 1999/00.

One last document is important to complete my description of the benchmarking project. In the fall of 1997 all of the universities agreed to a common process for the 1997 Alberta Graduate Survey. This arose out of concern about invalid and biased information about graduate employment. In co-operation with the Department, the costly graduate survey was amended so that everyone's needs could be met through one independent study. Both the Department and institutions made compromises in their requirements. Performance indicators and related definitions were also adjusted to achieve this co-operative undertaking.

Having traced the development of the benchmarking project as recorded in public documents, reference to the Mazmanian and Sabatier model is needed to focus on the independent implementation variables. Benchmarking grew out of the provincial accountability policy and AECD implemented performance funding in step with them. Benchmarking was not backed up by legislation. The risks for institutions and the system were very high. Benchmarking was under the direction of the finance, not the system information branch. Institutional responses were slow and reluctant because of these factors. As time passed, the Department's need to demonstrate progress increased, as did the institutions needed to minimise actual impacts. Subsequent revisions of the project reduced the project in terms of dollars and the scope of performance covered, so both goals were achieved. The weaker independent implementation variables resulted in significant changes to the policy outputs of the Department.

Access Fund

The Access Fund is not a new idea. In 1974 the Government of Alberta established a new Program Development Fund. Costs associated with developing and introducing new programmes were covered to encourage growth and innovation not covered in base funding. This fund had an annual budget of up to $20 million before it was phased out in the early 1980s because of tightening budgets. I was told the need to create new spaces for the post-secondary echo boom and the high cost of programme innovation kept interest in the concept of the New Program Development Fund alive. Figure 5.3 highlights the key public documents regarding the Access Fund.

ESTABLISHING THE FUND	
1994-1997 Business Plan	February – 1994
Establishment of the Access Fund	June – 1994
Access Fund: Key Criteria and Related Issues	August – 1994
New Directions	October - 1994
FUNDING REQUIREMENTS	
Access Fund: Content Requirements for A Letter of Intent	September – 1994
Access Fund: Content Requirements for A Full Proposal	October - 1994
IMPLEMENTATION AND REFLECTION	
A Funding Framework	June – 1995
Employability and the Access Fund	June – 1995
Access Fund Criteria	March – 1996
Access Fund: Overview	March – 1996
Process Evaluation of the Access Fund	May - 1997

Figure 5.3. Development of the Access Fund.

Access was one of the four goals for AECD in *Accountability: Expectations of the Public Post-Secondary System* in October 1993. Discussion about the access goal led to creation of an Access Fund as one of the strategies to increase learning opportunities in the system. The Access Fund was announced in the *Business Plan 1994/95 to 1996/97*. Money for the fund came from a reduction in the total grants to institutions. The Department announced the fund would be allocated on the basis of competitive bids from all institutions. Few details were provided beyond an indication that proposals should increase the system's long-run effectiveness and efficiency. Proposals would be evaluated by an advisory committee with limited departmental membership. This was consistent with the independent competition treasury encouraged throughout *Budget '94*. Unsuccessful applicants would experience a proportional reduction in funding from the government.

Four months later, the Department re-announced the fund's creation along with the actual budget allocations of $1.6 million for 1994/95, 16.9 million in 1995/96 and $28.5 million for 1995/96. The composition of the advisory committee was clarified. In chapter 5 I noted the government's desire to facilitate processes rather than to manage them. In step with that direction, the Minister established an advisory committee, rather than the Department, to be responsible for recommending proposals for funding. Of 10 committee members only 1 was from AECD. Accountability concerns are evident in the mandate given to the fund:

> The purpose of the Access Fund is threefold; to increase total enrolments by 10,000 student places for adult Albertans; to expand or create programs, to enable more adult Albertans to acquire the attitudes, skills, and knowledge required for employability and personal growth; and to improve the productivity and performance of the adult learning system by supporting quality program proposals that demonstrate effective and efficient use of public funds. (AECD, 1994e, p. 1)

How the purposes of the fund would be achieved was not clear. Many of the difficult issues the committee had to consider were summed up in *Access Fund: Key Criteria and Related Issues* issued in August 1994. Issues included allocation of the fund between subject areas and regions of the province, the length of programmes desired, defining appropriate capital expenditures, and evaluating the meaning of quality to the system, to the employer, and to students. *New Directions*, which came out in October 1994 offered policy direction. It clarified that the Access Fund would be used to decide how the system would be increased by 10,000 spaces. For the first time, the process was also presented as a way in which the Department and the post-secondary system would learn how to deal with the enrolment demand expected between 1998 and 2005. I was told it became impossible to sort out these questions and still have a competition for the 1994/95 funds, so a stepwise process was developed with the Department playing a larger role.

Unable to issue a comprehensive explanation of the process or criteria, the Department issued a request for proposals entitled *Access Fund: Content Requirements for a Letter of Intent* in September 1994. Institutions were asked to submit 5-page letter describing their intentions and a rationale for the proposal for the four criteria: access, employability, cost-effectiveness, and quality. The lack of clear procedures had the potential benefit of creating more consultation, but the advisory committee was not set up for this activity. Committee discussions and justification of selected proposals remained confidential. Through participation in this trial, the Department learned about the issues regarding this type of funding mechanism, such as the need to clarify cost allocation rules and specify areas of particular interest (AECD, 1994a).

Faced with massive funding cuts, institutions showed a lot of interest in the Access Fund and a lot of discussion about what was expected took place. Timelines were tight to ensure selections for 1994/95 money could be completed within the budget year. At the end of October 1994 the advisory committee issued *Access Fund: Content Requirements for a Full Proposal*. This was sent only to those who had sent in proposals that the advisory committee considered worthy of a detailed examination. The document specified the increased detail, but failed to provide any further direction about what was desirable in terms of subject area, types of credential, or regional emphasis. Full proposals were to included a list of KPIs that would be used to evaluate the programme, learner success, and employer satisfactions. *New Directions*, which had been issued earlier in October 1994, highlighted the significance of the KPI requirement. In it the Department indicated, "Using knowledge gained from developing and implementation the Access Fund, the Department will consult with providers and other Albertans to further develop existing program delivery mechanisms" (AECD, 1994a, p. 10). Even though the Department's direct influence over the fund was reduced by the delegation of responsibility to the advisory committee, the importance of compliance with the KPI initiative was established.

The initial proposal directions asked institutions how they would shut down or continue the programmes in 1997/98 because the Access Fund was to run out in 1996/97. Discussions between the Department and the institutions about this resulted in agreement that the programme would continue as a recommended envelope in *A Funding Framework*. This funding decision maintained competition and much funding flexibility for the government. To continue access funded programmes, an ongoing competitive evaluation would occur or institutions would have to restrict existing programmes to free up base funds. The clarification of ongoing funding facilitated a larger second round of proposals in 1995 and the third round of proposals in March 1996. Continued funding through the accessibility envelope of $32 million for 1997/98 was announced in *A Better Way II* during

February 1995. Following the budget, the success of the project was highlighted in *Employability and the Access Fund* and the policy paper *A Funding Framework.*

Despite the lack of clear selection criteria, the Access Fund operated through 1994/96 without major changes or announcements. In connection with *Measuring Up,* the Department released a more detailed progress report about the fund in June 1995. A summary of the selection criteria was also issued in March 1996 in advance of the last round of funding rewards. The Department issued its first public report at the end of the process in the form of a final report in March 1996. Over 600 submissions had been considered and 91 projects approved, resulting in just over 10,000 new adult learning spaces in the system. The reduction in base-funded learning positions that resulted from the cuts in funding to establish the Access Fund was not included in the analysis.

Access Fund: Overview contained significant statements about efficiency. The average cost per FTE of the approved Access Fund programmes was $2,600 compared to the $7,649 average for the entire system at the time. This difference was used to demonstrate the success of the accountability process. However, I was told considerable controversy erupted over this as the costs basis are not comparable. Community service, research, costs associated with ongoing faculty, and fixed costs of administrative systems are not included. The system costs are also based on a different mix of programmes than those accepted for access funding. This contributed to a nasty dispute between the University of Calgary, the Students Union, and the Auditor General over compliance with the 30% cap on tuition. Although this report was not issued by the branch responsible for the KPI project, it came close to making judgements about performance which, to address the fears of post-secondary institutions about misuse of KPI data, the Department had promised to avoid.

The successor of the Access Fund was the accessibility envelope, which had been announced in *A Funding Framework* in June 1995. Although the advisory committee continued the operation of the Access Fund, it was integrated into the Department's funding framework and accountability initiatives. The *Process Evaluation of the Access Funds,* prepared by Ernst and Young in 1997, seemed to support the management shift:

> The inclusion of the Access Fund Advisory Committee in the selection process was useful in de-politicizing funding decisions, and in bringing a different perspective to the process. However, in using such a committee again, communication would have to be enhanced with the Institutions to alleviate the concerns and questions with regard to how decisions are being made, and what information the committee is using to make those decisions. (Ernst & Young, 1997, p. 5)

Ernst and Young had been hired to review the selection process. They noted the problems with timing of the funding cycles. They also argued that many counter productive controversies had emerged because the relative importance of the criteria such as cost effectiveness versus innovation had not been resolved. One important concern was the way the initial increase in cost associated with some types of innovation was not addressed. These findings supported the decision to create the accessibility envelope.

Ernst and Young (1997) had strong words about the disincentives for collaboration in the Access Fund process:

> It was suggested by some stakeholders that to truly achieve the collaboration criterion, Institutions proposing similar programs should be brought together once the Letters of intent had been received, prior to the proposal stage. Not knowing which other institutions were interested in certain areas and not wishing to give ideas away to others prevented some collaborative ventures. It was felt that if the Department brought the institutions together in the middle, or at the beginning of the process, those Institutions could work jointly to provide programs in an industry that addressed the needs of that sector (p. 34).

The disincentive to collaborate had not been anticipated or addressed in any of the public Access Fund documents. However, the Department had also observed this and responded through the design of accessibility envelopes. Recognition was also given to the fundamental difference between the accessibility and performance envelopes. Accessibility awards were contracts for future performance. In explaining the changes the Department acknowledged a different set of measures were needed and made a subtle revision to the role of the advisory committee stating, "The operation of the committee illustrates how the decision context can be adjusted to help introduce various perspectives and support particular funding methods within the overall funding mechanism" (AECD, 1996a, p. 26).

Tracing the operation of the Access Fund during the time frame of this study provided insight into the dependent implementation variables described in

Mazmanian and Sabatier's model. Institutions responded quickly to the Access Fund because they wanted to recover the money taken out of the system to set the fund up. However, the impact of the Access Fund resulted in less co-operation in addition to increased learning spaces. The government perceived the entire process as an accountability success from the tone of the *Access Fund: Overview Report,* because it visibly achieved a productivity and access gain. The combination of positive perceptions and analysis of the actual impacts led to revision of the proposed funding framework to include an accessibility envelope. Thus, although the Access Fund was not successful by some criteria, the Department demonstrated that the accountability policy is adaptable, especially when supported by consultation with post-secondary institutions.

Accountability Reporting

The three initiatives just described are all parts of the Department's accountability policy. Through *New Directions,* the Minister made it clear that each of them was designed to improve accountability—doing a good job and communicating that a good job was done. Throughout the study the Minister continued processes and reports to demonstrate the impact of the government's policy.

After the accountability initiatives were publicly explained in early in 1995 through *Institutional Accountability in Alberta's Post-Secondary System,* the Minister issued *Institutional Accountability: A Progress Report* in October 1995. The Minister again emphasised the existing and new mechanisms for accountability. He explained the link between the 22 government KPIs, the 7 department KPIs, and the developing institutional KPIs. Accountability, he argued, was ensured by the regular public reporting of this information. Reporting occurred even if the information was less than expected. The emphasis continued in the *Business plan 1996/97 to 1998/99,* issued in February 1997. "Accountability: Albertans expect measurement and reporting of results for expenditure of public money. This will require involvement of all stakeholders to ensure relevant information is collected" (ACED, 1997f, p. 12). The new access-funded spaces, development of a performance envelope, and the KPI project were featured as accomplishments for the year. In June 1997, the *1997/98 Annual Report* was released. It was far more detailed than any previous report. The report was closely organised around the Department's four goals and related strategies and performance indicators. Every section of the report pointed toward goal-related action, though performance comparisons were not consistent. How the ministry's actions relate to the government was carefully explained.

In 1996 the Minister started an annual forum consisting of over 150 student representatives, employers, and other partners in the educational system:

> My intent was to provide everyone with the opportunities to explore various options with respect to these topics in a spirit of co-operation so that I could get a sense of the priorities as well as receive their input and advice. (AECD, 1996e, p .1)
>
> The Minister's Forum on Adult learning is one of the strategies designed to help ensure that the adult learning system is responsive to the needs of Albertans. (AECD, 1996e, p. 8)

The Minister indicated that feedback from this and subsequent forums resulted in changes to the Department's business plans. No details were given about what changes were made, but an extensive summary of discussions about employment and measurement issues was provided. The Minister continued to bring the measurement approaches to the attention of the public through *Rewarding Progress Towards Goals* in July 1997.

Through the Minister's public statements, we see continual reference to well-defined goals that was not evident at the start of the study period. I was told that there was now much more certainty around what the ministry was doing and how issues would be handled than ever before.

Summary

In this chapter I have described how AECD developed its KPIs and what outcomes AECD expected from the introduction of KPIs. The chapter is divided into four sections, each one dealing with a separate aspect of AECD KPI initiative. Separate descriptions and commentary about each of the initiatives was merited because different branches within AECD directed them. In each case the Department viewed and expected the introduction of KPIs to encourage an ongoing discussion about the accountability of post-secondary institutions. The expected impacts, implementation process, and use of KPIs are discussed further in Chapter 7 with the aid of the Bolman and Deal framework.

Chapter Six

Reactions of Post-Secondary Constituents to KPIs

The chapter 6 addresses my fifth research question, "**How did the University sector react to the introduction of KPIs**" and my sixth question, "**How do the KPIs as an implementation tool reflect the accountability policy**." The chapter is divided into two sections. The first section discusses specific reactions to introduction of KPIs contained in literature and which reflect comments made by my respondents. In the section of the chapter contains a discussion of the specific criticisms directed at the use of KPIs to implement the accountability policy.

Judged solely on public responses, KPIs are a significant accountability tool. Every December, *Maclean's* magazine publishes a special edition in which it ranks Canadian universities. The *Maclean's* ranking started in 1990 and is based on a set of KPIs. Regular news-stand sales jump 600% when the university edition comes out (Little, 1996). Several serious flaws with the *Maclean's* data have been reported. One example is ranking student quality according to high school grades even though grading standards are easier in Ontario. Universities speak out regularly against the ranking, some even refusing to participate. "Rod Fraser, president of the University of Alberta, says he considers it a mishmash of good measures of important indicators of a university's worth, bad measures of important indicators and measures that can be manipulated" (Little, 1996, D1). The increased sales volume at *Maclean's* and administrator reactions suggests public and student views were shaped by KPI information.

This study is about policy implementation. Policy statements set the tone and environment in which all other actions occur. Carver (1990) argues that policies allow leaders to leverage their vision to all levels of management without becoming aware of or involved in the overwhelming number of implementation details. He goes on to say, "because policies permeate and dominate all aspects of organisational life, they present the most powerful lever for the exercise of leadership" (Carver, 1990, p. 28). With so much at stake, the process cannot be left to chance. In commenting about post-secondary institutions Dennison, (1984) explains that the relationship between policy and action is too complex for simplistic explanations. This chapter reflects the variety and richness of constituent reactions to KPIs.

Specific University Sector Reactions

Many of the university sector reactions to the accountability policy and KPIs have been integrated into case presentation in chapters 4 and 5 The purpose of this section is to pull together those reactions so they are fully integrated into the case report.

Popular Literature

During my research I found that Department and university personnel were eager to point me toward three types of literature, regardless of the topic that I was specifically addressing with them. The first concern was the adoption of business methods on the assumption that universities are ineffective economically. I was lent several copies of *Academic Capitalism* (Slaughter & Leslie 1997), in which the author argues that the decline in public funding has shifted the way resources are allocated within universities. Faculty searches for funds have converged with corporate quests for new products. "Within public research universities, fewer and fewer funds are devoted to instruction and more and more to research and other endeavours that increase institutional abilities to win external funds" (p.13). Some of the KPIs are perceived to be having this very effect. For example, the structure of the enterprise revenue and instructional cost indicators could be providing a marginal incentive to shift the universities' and faculty's capital toward business endeavours. Slaughter's research was used to justify more autonomy and a return to pure research and teaching.

Slaughter's arguments contrasted references to the research of Perlman, Gueths, and Weber (1983) and others:

> Our thesis is that corporate lessons of survival, competition and success from an intrapreneurial perspective are relevant to institutions of higher education and to any organisation which needs to look to the future with some aliveness. We write about improving the productive capacity of a university. (p. 4)

In this context, KPIs were referred to as a tool that ensured past practices were tested and innovation justified. KPIs introduced a useful substitute for market mechanisms.

The United Kingdom moved to performance measurement and incentive funding in 1989, several years ahead of Alberta (Johnes and Taylor, 1990). The

British experience was quoted as justification for both Slaughter's perspective and the Perlman viewpoint.

Confederation of Alberta Faculty Associations (CAFA)

During the period of this study (1992/97), CAFA experienced internal conflicts and chose not to be not active in the early KPI discussions. Also, as a special interest group, the Confederation had not had significant input into the process but there was no evidence that AECD or the Alberta Government had deliberately excluded them either. The association did produce a formal response to *Encouraging Excellence and Rewarding Success in Alberta's Public Adult Learning Systems: A Proposal for Implementing a Performance Funding Envelope (CAFA, 1997).* I was able to observe CAFA's presentation to Department officials and the Deputy Minister in January 1997. CAFA argued that the selected key performance indicators provide an incentive to decrease quality. They provided specific examples of the negative incentives from the combination of less funding and KPIs. "Rising enrolments and decreased grants have forced institutions to increase class size, increase the proportions of part-time instructors and generally reduce student-instructors contact" (CAFA, 1998, p. 4). They concluded that the indicators do not capture quality issues. "Moreover, institutional performance often depends on factors outside institutional control, such as local economic conditions. It is difficult to find a way in which the 'performance funding' mechanism enhances performance in any qualitative way" (CAFA, 1998, p. 5). CAFA opposed the measures, though not the measurement, and argued for peer review and a process geared toward quality assurance.

The association used two different approaches in their presentation. First, CAFA presented a fictitious Alberta Advantage University, which granted degrees when students registered. They then presented how this university would earn the top score for accessibility, responsiveness, and affordability and therefore the highest performance award. Although they presented a humorous situation, CAFA argued that KPIs provided an incentive for universities to make marginal adjustments toward an Alberta Advantage University model. They also showed how contradictory actions were needed for a high score on the performance envelope and the Maclean's ratings. The second approach was to present *The Economic Benefits of Post-*

Secondary Training and Education in B.C.: An Outcome Assessment (Allen,1996). Although the Deputy Minister made it clear that she had received many copies of this report, she also indicated that the arguments were acknowledged through other accountability inputs. Although CAFA was given an opportunity to provide feedback, it did not appear to influence the development process. The Deputy was critical of the association for not participating earlier in the process. The CAFA response and discussion with the Minister affirmed the strength of the legislative process in place and that the ministry and the institutions were regarded as the central players in the discussion.

Universities Co-ordinating Council (UCC)

The UCC was used as a consultation mechanism in the early stages of the KPI development. Discussions with the UCC resulted in an agreement in October 1994 about the six areas that KPIs would cover. That agreement led to the formation of technical working committees for each area. However, in February, 1995 the mandate projected through the agreement seemed to be fading. The Assistant Deputy Minister forwarded a draft progress report of *Institutional Accountability in Alberta's Post-Secondary System* to the UCC, noting the Department had added measures. These measures were justified in terms of *Measuring Up* and other government obligations. At the same time the Deputy Minister sent a strong reminder to the UCC about the implementation timelines.

In July 1995 the technical committees *produced A Report on Performance Indicators: A Working Paper Guidelines for Next Steps* for the UCC to endorse.

> Alberta Universities will continue to work with the Department of Advanced Education and Career development in a joint effort to educate all those who need to know about performance and measurement and how it can be helpful in achieving outcomes. (UCC, 1995, p. 2)

The report outlined measures that would be developed, and extended the development timeline. However, the Department worked from this to develop the first KPI reporting manuals. The manuals issued at the end of the summer make no mention of the UCC committees; rather, they mention individuals responsible for KPIs at each institution. In November 1995 the Deputy Minister formally responded to the UCC process by indicating the areas in the report that fell short of the Department's expectations. Again, the deadlines were repeated. "We now want to confirm that test data will be expected by December 1995 and the Pilot Steering Committee must establish a schedule to meet that deadline" (Duncan, 1995, p. 1).

I did not come across any further official UCC documents contributing to the development process. Subsequent reporting manuals do not refer to the UCC committees. The reporting manuals list official KPI contacts at the institutions. These individuals have a greater mandate to represent their institutions. I was told at the end of the study period that the UCC committees were inactive. Ongoing consultation was directly done with institutional representatives. It appears that as the UCC failed to meet the scheduling requirements or became a vehicle delaying implementation, the Department shifted to working directly with institutions.

University of Lethbridge

The University of Lethbridge is an interesting example of the university sector's reaction to KPIs and the accountability policy. During 1990 to 1995, decreased demand in enrolment in business studies was an increasing concern. Although Dr. Shamsul Alam, then a professor and now a vice president, had researched how to remedy the situation, no substantial programme changes occurred. In 1994/95 the University of Lethbridge experienced a substantial system-wide drop in operating grants from $35,400,000 to $31,200,000. At the same time, it was also faced with the KPI project, the Access Fund, and the promise of performance funding. This sparked action, as evidenced by the President's report. "The University of Lethbridge is a winner, an institution that has taken in stride the financial changes others may see as negative and found a new equilibrium that allows us to thrive" (Tennant, 1997, p. 4).

The Faculty of Business applied to the Access Fund for a post diploma degree programme in Edmonton in 1995 that was an immediate success at increasing access to business studies at a low cost. In 1996 the faculty received additional Access Fund money for campuses in Edmonton and Calgary to expand the opportunities for college students to complete a business degree. The KPI and access incentives moved the contemplated programme changes forward faster than had previously been possible, according to Alam:

> But the biggest challenge came in developing the administrative processes, bringing uniformity to enrolment process standards and

> implementing a set of criteria or rules that would be uniform across the board. Once the standards were set, the second challenge was in building consensus among the colleges. And there were other issues around waiving the degree residency requirement. (CMA, 1997, p. 4)

As a result of this change and innovations in other faculties, the University of Lethbridge received more money from the Government of Alberta even though the base grants dropped. In 1997 the total revenues of the University of Lethbridge had grown by 50% since 1992.

I found considerable evidence that the KPI project provoked substantial operational changes in other institutions as well. For example, Athabasca University developed an aggressive growth strategy in its *1993/94 Business Plan*; NAIT (Spaans and Rea, 1993) and Mount Royal College (1993) moved early to align their management processes; and revisions were made to the mission of the Faculty of Environmental Design at the University of Calgary (Jamieson, Lee, Thompson & Wardell, 1995). While this was going on and apparent agreements to proceed were reached, the few official public university reactions reveal caution and concern. The following commentary is from the University of Alberta:

> The government has also placed a clear priority on delivering programs at the lowest cost possible. This may encourage universities and colleges to slash high-cost programs and move towards more lower cost per student programs. That, say educators, may serve institutions' short-term needs, but do great long-term damage to the entire advanced education system. (U of A *Folio*, 1997, p. 1)

Commentary

KPIs have been in use as an assessment tool for over 15 years (Banta, 1993). As far back as 1979, Habermas was sounding a warning about this use. He suggested the measurements would increase gatekeeping activities and trap academics in an entrepreneurial model. These arguments make sense and suggest that negative outcomes are predicable and inevitable. In chapter 2 and chapter 5, I presented the more positive predictions of the *Smith Report* (1991), which have found favour in Alberta and other jurisdictions. Smith is not the only one who thinks that KPIs can have a positive effect. Some of those positive predictions are discussed in this section.

KPIs are frequently presented as communication vehicles that accelerate the communication of policy to affected parties:

> These instruments may take the form of co-ordinated action in networks linking many organisations, some of which are self-regulating, and in which government may steer at a distance but may not necessarily control or determine outcomes. (Raab, 1994, p. 17)

Raab went on to argue that KPIs add structure and clarity to policy intentions that could not be achieved otherwise because of the decentralised nature of our public structures. Drucker also argued that the clarification of missions with KPIs would shape stakeholder attitudes:

> Performance in the non-profit must be planned. And this starts with the mission. Non-profits fail to perform unless they start with their mission. For the mission defines what results are in this particular non-profit institution. And then one asks: Who are our constituencies, and what are the results for each of them? (Drucker, 1992, p. 109)

Drucker's argument is supported by Greer and Carter's (1994) research. They found that KPIs ensured clear expectations without the costly administrative procedures that could reduce administrative flexibility. Pal (1997) goes even further by suggesting such flexibility is essential because agencies in the implementation chain are best qualified to determine how to effectively apply a policy to local situations. For Mazmanian and Sabatier (1981), these arguments predict that KPI usage will strengthen the influence of the independent implementation variables.

Some authors advocate KPIs from a governance perspective. Decentralisation in government and business has increased the use of agencies to complete important goals (Pal, 1997). However, the independence leads to insecurity and risks that must be monitored. In these situations, KPIs are important internal controls that assure boards that their directions are being implemented (SMAC, 1997). Wilson (1989) observed the same governance trend and commented on the need for trust in agencies. The accountability literature has changed the trust argument. Laughlin (1990) argued that trust is earned and maintained through accountability mechanisms. Consistent with this idea, Maskell (1996), an accountant, predicts unmeasured trust will lead to decreased accountability. He calls on accountants to actively create measurements that constrain managers to a narrow set of options. Governance concerns focus on the dependant implementation variables. In terms of Mazmanian and Sabatier's model, these authors are predicting that KPIs will increase attention on the principal's intentions throughout the implementation process.

The arguments in the previous two paragraphs suggest that KPIs are an incentive, which increases the likelihood of implementation. The Mazmanian and Sabatier (1991) model is consistent with Vroom's (1964) expectancy model explanation of motivations. KPIs clarify the desired performance and increase the ability of administrators to demonstrate rewardable efforts. Hettich (1971) presented evidence showing that output KPIs would increase the pace of research innovation in Canadian universities. Astin (1993) discovered that attention to student-to-student and student-to-faculty contact increased student learning. In related research, Brace, Elkin, Robinson, and Steinberg (1980) found that agencies were more likely to report performance measures. More recent research by Hyndman (1990) and Boyne and Law (1991) compared agencies with Departments and found that much attention was paid to performance measurement.

KPIs are also likely to improve implementation by drawing attention to policy intentions. The Mazmanian and Sabatier model presents implementation as an ongoing interactive process. Osborne and Gaebler (1993) argue that any measurements will do as a starting place because they will spark discussions that will clarify policy intentions. Carter (1991) also found the same outcome. Measurement moved organisations past the first stage of perfunctory compliance and stimulated criticism, analysis, and refinements in policies. Carter also found that the process encouraged the discussions to persist past issues on compliance and dealt with quality. Drucker(1992) also noted the role of performance measurement in discussions about policy intentions.

The Mazmanian and Sabatier model, predicts that KPI will increase the strength of the independent variables that influence the degrees of implementation. They're model also predicts that the KPIs will draw persistent attention to the accountability policy. Instead of policy intention fading in the face of other challenges, the KPIs will increase the chances of policy revision.

Commentary on KPIs as a Reflection of the Accountability Policy

The direct effectiveness of KPIs is not entirely welcome by the university sector. Policy models come with implied values and a lot of criticism has been directed at values implied by the use of KPIs in association with accountability policies:

> We think the 1980s were a turning point, when faculty and universities were incorporated into the market to the point where professional work began to be patterned differently, in kind rather than in degree. Participation in the market began to undercut the tacit contract between professors and society because the market put as much emphasis on the bottom line as on client welfare. The raison d'être for special treatment for universities, the training ground of professionals, as well as for professional privilege, was undermined, increasing the likelihood that universities, in the future, will be treated more like other organisations and professionals more like other workers. (Slaughter & Leslie, 1997, p. 5)

Drawing on research into post-secondary trends, primarily in the USA and Australia, Slaughter and Leslie argue that accountability policies are displacing the fundamental values of academic communities. I tended to view these criticisms as resistance to changes needed to accommodate the realities of the 1990s. However, Slaughter and others argue that traditional academic values and freedoms are needed to maintain a healthy society and are therefore worth defending on fundamental grounds. The Government of Alberta accountability documents seem to imply the post-secondary institutions are accountable to the government because of the funding they receive and do not explicitly acknowledge a wider societal accountability.

Speaking at the *Measuring Up* conference, then University of Alberta President Paul Davenport (1994) noted the French word for indicator implies an agent has infiltrated your organisation. Emberley (1996) argues that performance measures are a reaction to the "prickly" environment and that the *Maclean's* survey is a natural product of our tendency to litigate. Measurements satisfy a desire to manage everything with great certainty. Measurements prove the job was done and the product was exactly what was paid for. "The tendencies to rash decision making and to looking for silver bullet fixes arise from widespread confusion and extravagant expectation about the scholarly culture" (Emberley, 1996, p. 98). Searching for and reflecting on the imbedded values in my implementation model broadened the second phase of my data collection and led to several findings that I would otherwise have missed. The following sections of this chapter discuss the prominent infiltration arguments brought to my attention during this study.

Governance

There is general agreement about the definition of governance, but there is sharp disagreement about the goals behind the purpose of governance:

> Governance is defined here as control over decision-making processes. In recent years, the study of decision making has become central to the thinking of educational administrators because all other functions of administration can best be interpreted in terms of the decision-making process. (Hanson, 1991, p. 4)

The traditional interpretation of governance focuses on the internal processes set up to regulate and attain organisational goals. For example, Davenport (1994), then president of the University of Alberta, explained to an Association of Universities and Colleges of Canada conference how internal KPIs helped his university match administrative practices with strategy. He presented KPIs as managerial feedback but noted the danger of management by accountants. Critics take the danger seriously and argue that KPIs and accountability models transform the university governance system (Davenport, 1994). Rather than serving to achieve and preserve university scholarship, the governance system becomes an instrument through which outside values are imposed on the university.

The division over the purpose of governance systems is clearly illustrated by two of the presentations at the Association of Universities and Colleges of Canada conference concerning performance measurement. Davenport (1994) proudly described the performance measures developed by Department chairs at the University of Alberta. He explained how these measures promoted excellence and accountability within the university. Faced with reduced resources, the deans and chairs used these measures to help them reach a consensus about how to implement an overall reduction in spending. At the same conference, Naimark (1994) reflected on the influence of the Smith report quite differently:

> In each of these circumstances it is clear that the notion of accountability goes beyond the obligation of universities to be fiscally responsible and to manage their physical assets and human resources soundly. It also includes the question of how well universities live up to social expectations. The complexity of the accountability issue, so defined, lies in determining whose expectations, among the various sectors of society, should predominate and which of their expectations are legitimate or realistic. For universities to be unduly focused on the expectations of special interest groups or for them to be held accountable for matters that are beyond their legal powers or fiscal capacities, or for meeting conflicting expectations is unproductive. (Naimark, 1994, p. 1)

Naimark observed that accountability meant administrations were forced to respond to public agendas. KPIs became a way of drawing attention to public values that do not originate with the academic community at the university.

Perhaps the change would not be significant if the wider community had clear and consistent expectations of universities. Unfortunately, consistency is not a feature of our postmodern period:

> Contemporary approaches in general policy studies and in specific fields such as education work towards models of action that appear to fit reality better than received versions of how things happen. The constitutional myth about the role of parliamentary bodies in decision making, the civil service myth about the distinction between policy making and administration, and the myth of partnership have attracted criticism because their simplicity boarders on propaganda. Inevitably, because they employ models, new approaches also cannot be criticised for simplification per se. More serious problems would be a distortion of data to fit the model and a refusal to recognise the usefulness of other models. Other difficulties arise from vague and unusable definitions, such that one cannot be sure which empirical phenomena are relevant to a particular model. Still further problems stem from linguistic and conceptual chaos, such that different phenomena are labelled similarly or the same phenomena is labelled differently in the terms of two adjacent models. These problems have been pointed out in relation to the literature on pluralism and policy networks. (Raab, 1994, p. 7)

Dennison (1998) noted the proliferation of groups designated as stakeholders as a practical difficulty resulting from this pluralism. Governments, communities, transfer institutions, and employers are now all accepted as stakeholders in addition to students and staff. A different accountability criterion is needed for each type of stakeholder. The additional stakeholders groups are not direct participants in the learning community. Administrators are obliged to integrate the desires of the stakeholders into the operation of the academic community. Denison noted the power that these groups have to displace the scholarly goals of the institution. In this new system, government interest in universities becomes more focused on the policy outcomes that can be achieved with the money invested and less focused on supporting scholarly communities of students and staff.

Given the increased diversity of stakeholder groups, it is not surprising to find general agreement that governance procedures are not responsive. Carver (1990) expressed frustration with board accountability and their inability to see policy development in an exciting light. Carver advocated measurement of goals and use of independent agencies to spark action. Wilson (1989) argued that such decentralisation is the source of the problem. From research into the 1988 federal election, Wilson argues that transfer of operating responsibility to agents is a deliberate government strategy to avoid or distance themselves from the risks associated with hard economic decisions. Wilson and Carver are both observing that KPIs are used to address a perceived lack of institutional responsiveness. However, research into governance of British universities shows the medicine could be the problem. Berdhal (1990) observed that government and stakeholder attempts to ensure accountability resulted in a decline in academic freedoms. KPIs are providing data to continue the stakeholder discussions. With each new set of measures, interest in scholarly processes is diluted further.

If government has become a stakeholder, then it cannot be said that the expectations for performance from government and broader society are the same. Government interests then become an obstacle to the governance of an autonomous academic community:

> Every organisation has widely understood goals that are both assigned and determined by the organisation. Accountability comes from achieving and documenting the realisation of the goals. The key task is agreeing on indicators that do this. (Elton, 1988, p. 12)

Elton made this statement in relation to college funding in British Columbia and noted that agreement did not come easy. KPIs draw attention to government priorities that may not be compatible with institutional processes. Dennison (1984) provided an example of this emphasis in his discussion about university and government budget cycles. When universities admit an undergraduate student, they are accepting a four-year, fixed cost commitment. Government budget provisions are limited to one year. A completely efficient program revision would take four years to implement! Governments provide annual funding on the basis of economic and employment goals.

The governance arguments against KPIs imply there are negative unintended consequences from using KPIs, a powerful management tool, to implement accountability policy. KPIs draw attention away from internal processes and encourage inclusion of stakeholder interests in institutional goals. Institutional goals become diluted. In terms of the Mazmanian and Sabatier (1981) model, dilution reduces the influence of the structural implementation variable. Any time the independent variables are weakened, policy implementation becomes less likely.

Corporate Models

Corporations are established by shareholders to earn a rate of return. Education is a long-term process. It takes decades for society and individuals to achieve a positive financial return on educational investments (Bluestone, 1993). Even educational advocates like Dennison (1984) point out that education is an ineffective short-term investment. Hettich (1971) noted the government's frustration with poor productivity despite enormous increases in government funding for post-secondary education:

> One cannot simply blame the universities for the downward trend in total productivity observed in this study. While it may be true that universities have been reluctant to undertake a re-examination of existing degree programs, such programs are rarely questioned by other groups in society. Both government and private industry use traditional university degrees to determine qualifications for employment. Any successful redefinition of programs would require the support of all major groups in society. (Hettich, 1971, p. 67)

He anticipated that a general lack of appreciation about the nature of returns from education in society would lead to managerial interventions. In the corporate model, returns are managed closely through performance indicators:

> Performance indicators such as customer service, quality, delivery speed, flexibility, productivity, people, and value, although fundamental attributes of a successful company, may be difficult to link directly to explicit measures of financial performance, such as sales growth, market share, profitability, return on capital, cash flows, and shareholder value. In fact, in the short run, emphasis on performance indicators may adversely affect the financial measures. As a result, resistance to the introduction of such measures may be strong. The point must be made that an investment in any new performance indicator system is similar to any other investment, in that returns are often negative in the short run only to become significantly more positive over time. (SMAC, 1997a, p. 45)

Application of the corporate model implies monitoring student satisfaction and employment will indicate positive future returns. Critics of KPIs argue that KPIs encourage a financial evaluation of the educational process that is not valid. This section of chapter 4 contains a description of their critique.

Corporate advocates view universities as an untapped source of capital (Slaughter & Leslie, 1997). Technology, facilities, and professors are viewed as untapped private capital. Tan (1997) accused corporate interests of viewing universities as shopping centres of technical information. Tan goes on to demonstrate how difficult it is to justify investments in humanities that train us in community processes. Slaughter and Leslie go further than this by critiquing governments for not creating incentives for universities to allocate their resources to humanities. Professor Nelson went one step further by implying that university training is being used to manage capital rather than citizenship. He quoted John Ralston Saul's Massey lecture:

> Thought is not a management function. Because the managerial elites are now so large and have such a dominant effect on our educational system, we are actually teaching most people to manage, not to think. (Nelson, 1997, p.187)

In the corporate model, government expenditures on post-secondary education are a purchasing decision. Carver (1990) noted that the change is beneficial because it introduces a market test to address the lack of academic rigour. Denison (1984) noted that institutional efforts to replace reduced government spending introduces a market test to temper slow-moving decision processes. However, Emberley (1996) notes that market empowerment also affects the learning community:

> Every faculty member and staff administrator can recount many tales reflecting the efforts of student empowerment over the last twenty years: many students believe and act on the belief that grades are negotiable, others see rules and regulations as being subject to personal review, still others think academic decisions are open to endless appeal. In one sense it is a healthy sign when students exercise their judgement, call error to account and assist in opening opportunities for fresh starts and new directions. (Emberley, 1996, p. 99)

Slaughter and Leslie noted an even more serious impact when they looked into the impact on faculty:

> To manage the shift from more unrestricted to more restricted moneys, institutions will likely spend more funds on administration as they attempt to oversee the transition as well as to manage new revenue generating endeavours (such as institutional advancement—fund raising from private sources—and sales and service of their own educational activities) and academic capitalism (such as offices for patenting and licensing, technology transfer, arm's-length corporations, spin-off companies, and

> research parks). In other words, we believe that changes in the national financing patterns of higher education will promote academic capitalism. (Slaughter & Leslie, 1997, p. 65)

The corporate culture caused significant marginal changes in the behaviour of academics. Government funding stops being a stable source of support for scholarly investigation. Instead, it becomes a source of facilities and revenue to subsidise other activities.

The most passionate arguments against the corporate model are cultural. Emberley (1996) argues that there is a huge gap between the technological emphasis of corporations and our inner selves. Although scholarship has economic consequences, the inner motivation is not business as usual:

> The essence of the university is the important and complex interaction of the scholarly culture and the needs of the students. This process is stimulated, and its respective parts are refined, through conversations and books. The forms of understanding and friendship that compromise the university's highest accomplishment emerge in the leisurely dialogues and meditative withdrawal that the university affords its members. While this leisure is lost from the explicit productive purposes of society, it is time invested in future gains to society, in which understanding is matured and the tendencies of over certainty and rashness are corrected. (Emberley, 1996, p. 257)

The corporate model is said to encourage a consumerist approach to learning as merely the mastery of information. Meaningful educational outcomes take considerable time to emerge. The scholarly process is also complex and not well understood. It is therefore not possible to set measurable short-term goals that foster scholarly centres. KPIs focus on goals. In terms of the Mazmanian and Sabatier (1981) model, KPIs encourage policy outputs that dilute institutional attention away from the core values that have made academic cultures a success.

Measurement Methods

Methodology is also used to attack KPI usage. Critics dispute the credibility of specific measures. A summary of some arguments made along these lines is presented in this section of the chapter.

Emberley (1996) offers two explanations for the current interest in performance measurement in *Zero Tolerance: Hot Button Politics in Canada's Universities.* He first argues that public funding has not kept up with the demand for post-secondary education. Faced with a shortage of funds, both universities and governments must use measurements to justify an allocation of the limited resources. General confusion and discord concerning the purposes of scholarly culture are presented as a second cause of the interest in performance measurement:

> Taking aim at only the surface, and apparently ignorant of the tangle of expectations that the university has traditionally attempted to meet, those who have decided to expose the university's affairs to public opprobrium and to clean house are contributing to the decay. *Maclean's* has led the pack. (Emberley, 1996, p. 114)

Emberley argues that performance measures fail to capture the complexities of scholarly undertakings and thereby improperly reconstruct the purpose of university. As a result the measures are not intended to foster a better understanding of scholarly process and are therefore not credible.

Measurements are said to lack dependability because the basic data are not generated consistently. High school grades provide a good example. Maclean's used high school grades of new students to determine that the University of Alberta attracted lower quality students than the University of Toronto. Investigation by the university revealed recent grade inflation in Ontario after provincial standards were discontinued. Results on international examinations confirmed grade inflation (Little, 1997). The KPI project has provided many similar examples. Cameron (1982) argues that performance measures distort actual performance. The University College of Cape Breton was penalised by *Maclean's* for having the lowest operating budget per student because it indicated a lack of resources. However, other analysis revealed the college has one of the top value-added impacts on its students, contradicting the implication that student support is inadequate at the University College of Cape Breton. Cameron concluded that performance measures could not provide a complete story about quality.

Quality is frequently mentioned in discussions about measurement methodology. CAFA (1997) argues that performance measures cannot provide a comprehensive assessment of quality. Measures draw attention to aspects of quality but cannot provide a context for interpretation. CAFA also noted that general economic conditions are more significant than program quality on new graduate employment outcomes. In the short run, performance can only be improved through minor calculation adjustments. Rowley (1995) concluded that quality could not be consistently measured because there are so many offsetting components. She argued that only compliance to standards could be measured. The UCC (1995) picked up on this argument, advocating a process of investigation. It wanted to develop a conceptual understanding of processes leading to the desired performance outcomes.

Dennison (1998) asserts that universities should not allow any performance measurement until the scholarly process is fully understood. Although he did not agree with Dennison's conclusions, Carver (1990) also argued for caution. He noted that the measurements send such strong messages through organisations that one has to get them right. All of the authors quoted in this section avoid stating the obvious—there does not appear to be a conceptual model explaining the casual relationships that have an impact on a quality university education:

> Proponents of the philosophy of total quality management (TQM) argue that focusing on leading indicators (such as market penetration, customer satisfaction, quality, speed, workers competence, and morale) leads to good numbers: managing the numbers directly may mortgage the future. In addition to the traditional, historical, and internal financial measures that give the "score," performance measurement systems must focus on the future, on external relationships, and on non-financial as well as financial measures. (SMAC, 1997b, p. 2)

Measuring performance and quality without a fully justified model of learning seems perilous and captures the fears of the critics.

At a conceptual level, the methodology critics appear to be concerned that KPIs reinforce unproven causalities during the policy formulation process. Costly implementation mistakes and unintended data manipulations are inevitable consequences as administrators struggle to deal with an ill-defined model of the scholarly world. Performance models should highlight agreed on causal factors.

Economic Impact

I found more than 60 studies written since 1990 about the impact of post-secondary institutions on their local economies. The volume alone suggests that these reports are considered important by senior administrators. Economic studies are also very expensive and time consuming (Kinnick & Walleri, 1987). The reason for the interest is clear:

> In an environment of fiscal constraints, declining enrolments, and budget cutting, it is not uncommon for the CEOs of publicly supported universities to justify their budget requests to state legislatures on the basis of the net economic benefits their institutions bring to their states. Private universities, as well, want to demonstrate their economic contributions to their respective regions if only to enhance their image of concerned corporate citizen and neighbour. The increasing direct role in promoting economic development that both public and private universities are being asked and, indeed, expected to play is a further reason for having the capacity to measure a university's regional economic impact. (Goldstein, 1990, p. 51)

Economic impact was not included in the Alberta KPI project. Apparently, economic impacts are difficult outcomes to measure, so university outputs are used as an indicator of positive outcomes. The Government of Alberta is monitoring expenditures to ensure they produce a return for Albertans (Alberta Treasury Department, 1994b). As evidenced by their investment in economic impact studies, Alberta post-secondary institutions believe the government does not treat expenditures on them as investments.

Economic impact studies can pursue three different levels of analysis. The most popular level was explained in a handbook by the American Council on Education. *Estimating the Impact of a College or University on the Local Economy* advocates a straightforward accounting of direct expenditures and application of economic multipliers to establish each category of expenditure (Caffrey & Isaacs, 1971). Elliott, Levin, and Meisel (1988) argued that more attention has to be paid to factors affecting economic development. Their model added a level of required analysis about the regional origins and destination of university revenues and expenditures. In this way, the impact takes into effect whether the expenditures are new regional funds or money reallocated through the local taxation system. The most complicated and sophisticated model was developed by Bluestone (1993). Bluestone adds the discounted present value of all increases in economic activity because of the higher lifetime earnings and tax payments made by university graduates. He also estimates the net economic development impact resulting from university facilities such as conferences, cultural events, and the attraction of employers to a well-educated workforce. Each level of analysis becomes more abstract and costly, but demonstrates even greater social returns on the government's expenditures.

Alberta universities have produced many economic impact studies during the period of this study. Emberley (1996) argues that the economic impact arguments are needed to demonstrate the effectiveness of academic autonomy that appears so inefficient when compared to a corporate production model:

> Practices such as tenure and paid sabbatical make no sense unless academic freedom is seen as the primary purpose of the university. Academic freedom is seen as a privilege given to the few to pursue in leisure "inconsequential adventures" that will appear from the outside as frivolous and irrelevant. It is also the privilege to cultivate understanding and critical judgement without fear of reprisal, the means and results of which will be seen from the outside as controversial and uncomfortable. Yet, from the apparent useless and irrelevant exercise of academic freedom are generated by-products that society will find useful—from gene therapy to CD players—and from the controversial and uncomfortable will stem, among other goods, progressive political and legal reform. Without academic freedom, and an institution that enshrines its privileges, our society would lack direction and purpose. (Emberley, 1996, p. 274)

This would appear to explain the motivation of Alberta universities to invest in economic impact studies. For example, a University of Calgary report states, "while most Calgarians would acknowledge their University makes a significant educational, cultural, and social contribution to the city, many would be unaware of the large economic stimulus provided by the university" (Office of Institutional Analysis, 1994, p. 1). Studies by the University of Alberta and the University of Lethbridge repeat this emphasis. (For example, see Western Centre for Economic Research, 1990 and Institutional Analysis, 1993.)

The universities are using the economic impact reports to combat the notion that public enterprises must be tightly controlled (Wilson, 1989). Economic impact studies imply government contributions to universities are attractive public investments. These impacts are not considered in the KPI project but were listed as an existing accountability process (AECD, 1993). It is hard to assess the impact of these studies on university funding. The development of funding envelopes indicates the government is not fully convinced that economic benefits arise from the traditional operating practices of academic communities.

Lead times

All my respondents noted concerns about the link between the KPIs, funding and the timing of behaviour changes. One respondent complained about the process this way:

> …its got to be treated bureaucratically and part of the reason for that is the mistake in philosophical link between the money and the kind of reward you government is giving and what you might think needs to be changed over here to promote that behaviour that's getting rewarded. There is no connection. It's just plain money and it's money for things that give us points but we don't go back and say, for example, what could we do to improve completion rates? We may fuss about it, but there isn't that kind of direct link and there certainly isn't a direct link between the money that's awarded and programs that would permit you to address effectively the things that are giving you the money the KPIs in the performance-based funding that's giving you the money.
>
> Its just money that comes in and in the budget allocation process the Departments may say, well, as some have, …. That has no relationship at all on the this based funding and the indicator on that.

Other similar responses indicated that administrative processes, such as budgeting, are not being adapted to the KPI model. However that was explained somewhat by a timing issue that was described to me in the following way.

> But the thing was it was it was out of sync with the realities within an institution like what they were going to use enrolment figures that meant that if we were to get our points as been determined as they were at the time on assessment we would have had to take in students two years prior to ever be able to see the money, because it would take that long to filter through in the calculation that showed that we has increase by whatever the percentage was.

The budget processes of universities are very cumbersome and reflect the long term planning complexities of program management. The budget and managerial processes can, therefore only adapt slowly to the introduction of KPIs.

The universities do not appear to be ignoring the problem of long lead times. In the context of this problem one respondent indicated the university was responding by developing internal measures to reflect short term actions the universities felt will take some time to show up in the KPI results.

> We're also at the same time developing internal performance indicators which we believe are better indicators of what our performance is because we don't really believe in these provincial KPIs.
>
> It's (KPIs) very much the common mans approach in a sense that it puts the decision making back on us if we want to get more funding well then we've got to improve in the KPIs and we get all this stuff that's attached with strings like all the envelope funding, all the access funding, all have strings attached to it.

It was evident to me that while the universities are reacting to KPIs, in the time frame of this study the KPIs have not been embraced or adopted as part of their operating systems. The universities still regard the KPI process as a short-term managerial phenomenon within the Alberta Government and AECD that will pass.

Summary

In this chapter I have described university sector reactions to the introduction of KPIs and discussed how KPIs as an policy implementation technique reflect the Alberta Government's accountability policy. The university sector, including the Confederation of Alberta Faculty Associations and the Universities Co-ordinating Council, had expressed profound concerns about the use of KPIs but it has reacted administratively in response to the KPIs employed. KPIs have tended to narrowly define the meaning of The strategies employed by the university sector to defend against the narrowing effect KPIs have implicitly had on the definition of accountability were discussed. Chapter 7 provided more analysis of discussion of the case from the perspective of Bolman and Deal's (1991) model.

Chapter Seven

Case Analysis

An analytical-chronological approach was used to organise the case story-line in chapters 4 and 5. Chapter 6 addressed the reactions of the university sector. All models and researchers have biases. Bolman and Deal (1991) developed a model of organisational analysis to help managers reflect on their assumptions and become aware of perspectives other than their own. This chapter contains an additional analysis of the data by using the Bolman and Deal model. It provides a deeper response to my fifth and sixth research questions, **"How the university sector reacted to the introduction of KPIs**?", and **"How the KPIs as an implementation technique reflected the accountability policy**?" An additional purpose of this study was the assess the use of Bolman and Deal's model to evaluate case studies and the last part of the chapter contains a commentary on the usefulness of the Bolman and Deal model.

Four Frames

Policy implementation takes place through organisations. However, organisational theory does not offer a well-ordered and cumulative body of research that can be used to analyse implementation problems. Elmore noted, "The single most important feature of organisational theory is its conceptual anarchy" (Elmore, 1978, p. 187). He found this was a major obstacle to effective research about implementation. Implementation researchers have dealt with this obstacle by using models of individual behaviour to analyse implementation cases (Bosetti, 1986; Burger 1988; Pisesky, 1992). An alternative response to the lack of a consistent model was suggested by Elmore. Elmore observed and considered the success of Graham's experimental use of completing organisational models to analyse the Cuban missile crisis. As a result, Elmore organised organisational theory relating to implementation into three categories and argued that using all three would produce the most complete set of perceptions and conclusions about implementation cases.

The use of multiple paradigms to analyse an implementation case is consistent with the interprevist perspective. The interprevist believes the social world is built on a constructed set of precarious symbolic relationships that are continuously affirmed or changing (Morgan, 1995). Bolman and Deal sum up the process this way:

> Behind every effort to improve organisations lies a set of assumptions, or theories, about how organisations work and what might make them work better. All managers have theories, though they may not think so (we use the term theory broadly to refer to any set of ideas that attempts to perform the basic functions of theory in science: explanation, prediction, and control. (Bolman & Deal, 1991, p. 9)

Researchers since Elmore have refined the multiple paradigm approach (Bolman & Deal, 1991; Morgan, 1997). Bolman and Deal have organised the diversity of organisational theories into the four frames used in this chapter. In the following sections of this chapter, the case data are revisited with reference to the frames developed by Bolman and Deal.

The Structural Frame

Here is how Bolman and Deal describe and define the structural frame:

> The fundamental responsibility of managers and leaders is to clarify organisational goals, attend to the relationship between structure and environment, and develop a structure that is clear and appropriate to the goals, the task, and the environment. Without such a structure, people become unsure what they are supposed to be doing. The result is confusion, frustration, and conflict. In an effective organisation, individuals are clear about their responsibilities and their contribution. Policies, linkages, and lines of authority are clear. When an organisation has the right structure, and people understand it, the organisation can achieve its goals and individuals can be effective in their roles.
>
> The job of a leader is to focus on task, facts, and logic, not personality and emotions. Most "people" problems really stem from structural flaws rather than from flaws in individuals. Structural leaders are not necessarily authoritarian, and do not necessarily solve every problem by issuing orders (although that will sometimes be appropriate). Instead, they try to design and implement a process or structure appropriate to the problem and the circumstances. (Bolman & Deal, 1991, p. 355)

Aspects of the case that are consistent with the structural frame are highlighted in the following paragraphs.

KPIs are compatible with the structural frame. A rational planning and goal-setting process was established with the *Simpson Report* and *A Better Way* in February 1994. In those documents, the government argued that accountability was achieved by setting and monitoring measurable goals. Regular presentation of the performance indicators would ensure government activities stayed on track. After the first round of business plans, there were visible efforts made to link the government goals with AECD strategies. AECD in turn also asked institutions to link their goals in a similar way. The Premier introduced accountability legislation, which co-ordinated the efforts of the Treasurer, the Auditor General, and the Minister of AECD through mandatory KPI reporting. Co-ordination was also seen through the Department's division of accountability responsibilities to several different branches. System information, Access funding, benchmarking, and KPI development were all allocated to different branches in the Department.

Rational sequencing of events to keep things on track was also evident in the dealings of Department with the institutions. A Department official's speech to the Canadian Ministries of Education Conference demonstrated the Department's reliance on the cautiously designed four-stage process to keep things on track (Orton, 1997). Careful process was also evident in the way the plans were made to bring the funding mechanism into line with the accountability policy. Rather than start contentious discussions to explore alternatives, the Department relied on an external expert, Dr. Sheehan, to provide a logical framework. My interviews with the Department revealed a great deal of satisfaction with institutional responses to KPIs. The interviewees indicated that the rush to publish institutional KPI data had slowed because the system was on track. UCC committee members also noted changes in how faculty responsibilities are allocated and operations monitored in response to the KPIs, even through KPIs are reported publicly at the institutional level. The volume of new initiatives sparked by the Access Fund provide further evidence of the process. KPIs provided direction and a rational justification for decision making.

Another feature of the structural frame is the assumption that economic rewards and penalties are an effective way to control performance. An early feature of the government's accountability policy was the deficit and debt. Through the Al and Berta metaphor, the government emphasised how a prosperous future could be guaranteed through careful budgeting. The Treasurer argued in *A Better Way* and *Beyond the Bottom Line* that funding would be allocated on the basis of performance only. This approach was also evident in the Department. The Department consistently indicated it would take forward resource requests if the needed and expected results could be demonstrated with KPI data.

Actual behaviour supported the assumption that economic rewards motivated AECD and institutions. AECD was rewarded with the Access Fund in response to its relatively fast and thorough response to the government's accountability policy. The Access Fund was designed to demonstrate increased efficiency and access. Institutions rapidly produced hundreds of proposals that produced the desired KPI results to receive a funding increase. It was clear from my interviews that the Department sees KPI diligence as central to any attempts to get further funding. When the UCC issued *A Report on Performance Indicators: A Working Paper, Guidelines of Next Steps*, which recommended a slow process of study that would exceed the time allowed, the ministers' response was swift. Development shifted to experts, and institutional experts working with the government and the universities went along with the shift. A process of ongoing revision in response to KPI 'facts' is evident.

Communication of factual information and the use of authorities to resolve conflicts is another feature of the structural frame. Although many alternative explanations of the deficit were possible, KPIs were used to present a spending and accountability problem. They implied that the source of the problem was a lack of direction that could be fixed through clear goal setting and measurable strategies. Given the Klein success in the 1994 election, the effectiveness of the message was evident. Since then the government has persisted with *Measuring Up* reports. We have also seen the Minister of AECD use KPIs regularly and repeatedly to communicate Department progress. KPIs added an objective appearance to the Department's plans, which was enhanced by using external experts. Barry Snowden directed the KPI discussions, the Population Research Centre resolved conflicts about the graduate survey, and Dr. Sheehan advanced proposals for the new funding mechanism.

KPIs were used to set out the goals of the government and were developed into a direct link to departmental and institutional goals. Resistance to KPIs quickly became the equivalent of saying you did not want to be accountable. So, although I was told about concerns by institutions, and UCC and CAFA documents revealed substantial concerns about KPIs, compliance was swift and at times irrational. It is hard to explain why institutions pursued 4%+ increases in enrolment when the maximum reward was only 1.5%. Clearly, new money and the risk of competitive failure are motivating. So, in this case study, we see a lot of evidence to validate the assumptions that Bolman and Deal argue underlie the structural frame:

> The structural frame, drawing mainly on the discipline of sociology, emphasises the importance of formal roles and relationships. Structures—commonly depicted by means of organisation charts—are created to fit an organisation's environment and technology. Organisations allocate responsibilities to participants ("division of labour") and create rules, policies, and management hierarchies to co-ordinate diverse activities. Problems arise when the structure doe not fit the situation. At that point, some form of reorganisation is needed to remedy the mismatch. (Bolman & Deal, 1991, p. 15)

Any new policy affects the stability of roles and relationships. From the structural frame, we can see that KPIs were used to communicate, guide, and reward new patterns of behaviour. On the basis of my research observations, the KPI initiatives of the government and the Department were effective from a structural perspective.

The Human Resource Frame

Here is how Bolman and Deal describe and define the human resource frame:

> People are the heart of any organisation. When people feel the organisation is responsive to their needs and supportive of their goals, leaders can count on their commitment and loyalty. Administrators who are authoritarian or insensitive, who don't communicate effectively, or who don't care about their people can never be effective leaders. The human resource leader works on behalf of both the organisation and its people, seeking to serve the best interests of both.
>
> The job of the leader is support and empowerment. Support takes a variety of forms: letting people know that you are concerned about them, listening to find out about their aspirations and goals, and communicating personal warmth and openness. A leader empowers people through participation and openness and through making sure that they have the autonomy and the resources that they need to do their jobs well. Human resource leaders emphasise honest, two-way communication as a way to identify issues and resolve differences. They are willing to confront others when it is appropriate, but they try to do so in a spirit of openness and caring. (Bolman & Deal, 1991, p. 359)

Aspects of the case that are consistent with the human resource frame are highlighted in the following paragraphs.

The human resource frame emphasises open communication and participation to establish goals and produce a commitment to achieve those goals. Although the government held public forums like Towards 2000 and budget roundtables, the institutions and the Department were not major participants. They were labelled as vested interests. Discussions were so rushed that the outcomes do not seem very credible. However, the Department was far more inclusive in its planning processes. The Department and institutions were involved in the development of New Directions. Frequent reports were issued as policies were developed and each report revealed substantial changes that could be attributed to participant feedback. Changes to the KPI definitions in the second edition reporting manuals are a good example. Rather than telling institutions to get on with it, the Department admitted its shortcomings and worked with the committees to find better ways of proceeding.

Actual behaviour of the Department demonstrated the assumption that people are motivated through participation in an open process. Rather than house responsibility for the accountability policy in one branch of the Department, the Department included several branches in the process by dividing policy development into four separate initiatives. So, although the budget reductions of the government were causing uncertainty and confusion, which would likely decrease motivation, the Department was able to engage many staff in the change process. During my practicum and through the formal interviews with two Department experts, the long work hours and commitment of all those I met was evident and surprising given the circumstances. The participative process also reduced uncertainty for the institutions. Each branch established its own institutional contacts and meetings with institutional representatives. This provided opportunities for considerable participation from post-secondary institutions. Discussion about KPI developments pulled all of their separate activities together. Although the government forums seemed to decline in frequency and importance during this study, AECD relationships appear to have gained strength. Open discussion about how to co-ordinate KPI development fostered understanding and commitment.

Another feature of the human resource frame is the assumption that people are motivated to grow and that growth is supported by ongoing evaluation. KPIs were used to foster a learning environment in the Department. When the Department introduced the Access Fund, it indicated the process would be used to learn how learning spaces could be temporarily increased. Ongoing consultation with institutions and Ernst and Young's assessment of the three-year trial are clearly reflected in the changes made in the Access Fund's successor—the accessibility envelope. KPIs were used to spark discussion between the Department and institutions. Every time issues arose they were addressed. Examples of this were the Department's willingness to hold a second KPI pilot and the revisions to the performance envelope report card. Most telling is the lack of negative evaluations of institutions in public documents. Only progress and achievements were noted. When commenting on institutional accountability, the Department acknowledges a responsibility to help troubled institutions address the shortcomings that KPI data highlight. It is a shame the government approach was not the same. The harsh language used by the Treasurer to describe the intended uses of KPI data, combined with an expressed distrust of vested interest goals, increased the level of insecurity. It was evident in my conversations with participants that the difference in style was confusing.

The purpose of communication in the human resource frame is to express needs and feelings and to exchange other important information. Any conflicts that arise are addressed through established relationships. Passing information was an important feature of the accountability policy in the Department. *A Job Well Done, A Funding Framework*, and *Defining Performance Benchmarks* all provided a significant amount of historical data and proposed alternative ways to address current needs and problems. Many meetings were held during each stage of the KPI development process and the list server provides evidence of a team spirit. When hard decisions came (e.g., finalising the performance envelope report card), compromises were made. KPIs were used to identify weak areas in which the Department would work with the institutions. The Department did not embarrass those it had worked with and the institutions continued to support the Department.

So, in this case study, we see a lot of evidence to validate the assumptions that Bolman and Deal argue underlie the human resource frame:

> The human resource frame, based particularly on the idea of organisational social psychologists, starts with the fundamental premise that organisations are inhabited by individuals who have needs, feelings, and prejudices. They have both skills and limitations. They have a great capacity to learn, as well as a sometimes greater capacity to defend old attitudes and beliefs. From a human resources perspective, the key to effectiveness is to tailor organisations to people—to find an organisational form that enables people to get the job done while feeling good about what they are doing. (Bolman & Deal, 1991, p. 15)

Any new policy causes people to feel powerless and confused. From the human resource frame, we can see that KPIs were used to exchange information and explore ways to grow. This was far more evident in the dealings of the Departments than with the government policy. On the basis of my observations of the accountability initiatives, the KPI project helped the Department address organisational dynamics underlying the human resource frame.

The Political Frame

Here is how Bolman and Deal describe and define the political frame:

> Managers have to recognise political reality and know how to deal with it. Inside and outside any organisation, there are always a variety of different interest groups, each with its own agenda. There are not enough resources to give everyone what he or she wants, and there is always going to be conflict.
>
> The job of leaders is to recognise the major constituencies, develop ties to their leadership, and manage conflict as productively as possible. Above all, they need to build power bases and use power carefully. They cannot give every group everything it wants, although they can try to create an arena for negotiating differences and coming up with reasonable compromises. They also have to work hard at articulating what everyone in their organisation has in common. They must tell the people in their organisations that it is a waste of time to fight each other when there are plenty of enemies outside that they can all fight together. Groups that fail to work well together internally tend to get trounced by outsiders who have their own agendas. (Bolman & Deal, 1991, p. 361)

Aspects of the case that are consistent with the political frame are highlighted in the following paragraphs.

The political frame emphasises opportunities for groups to make their interests known and arenas where conflicting interests can be aired. In October 1993 AECD announced, through *Expectations of the Public Post-Secondary System,* that it was responsible for ensuring the public's demands for accountability were met. Deficit reduction formed a powerful backdrop for public discussions about accountability. Government consultation through public forums minimised stakeholder involvement because of their vested interests. Public institutions became less important as arenas of public debate and more important as service providers. KPIs were an important planning tool. They limited and focused the government interests in the post-secondary system. Faculty, administrations, distinct communities, and students found the scope of their activities was limited. Government and AECD KPIs limited the range of claims that would be regarded as legitimate. A realignment of power resulted and the ensuing frustration was evident in the research papers of CAFA, Dennison, and Slaughter and Leslie. KPI discussions represented a major change in the arenas available to discuss stakeholder interests.

Actual behaviour of the Department demonstrates the political assumption that people are motivated by coercion, manipulation, and seduction. The KPI development process was bounded by deadlines set by the Department. When the UCC attempted to slow the implementation process, there was the immediate threat of unilaterally imposed measures. Institutions that had been unable to prepare data or satisfy themselves about the measures quickly found the time. Funding envelopes directly manipulate institutions toward performance goals desired by the government. Given the number of applications for the Access Fund program, managers found the money very seductive. KPIs represent authority and those that can contribute to KPI improvements are able to command more power. The rapid increase in nongovernment funding also indicates how focus on KPIs has coerced institutions into accepting more commercial influence in the scholarly process.

Another feature of the political frame is the assumption that evaluations are an opportunity to exercise power. KPIs have created a distance between the government and its agents, such as AECD and post-secondary institutions, who deliver programmes and services. This enables public evaluation to occur without the government appearing to criticise itself. KPIs provide the government and the Department with a lot of data with which to make evaluations. Throughout this study there were unexplained shifts in benchmarking standards. So far aggregate comparisons have been used, but the data exists to be far more judging. For example, the specific programs could be compared. Institutions indicated a significant level of fear concerning the use of data to make comparisons. I noted the changes in practices adopted by universities to adjust their affordability outcomes. The evaluative aspects of the KPI project have therefore enabled deans and administrators with the best opportunities to change KPI outcomes to gather power.

The purpose of communication in the political frame is to influence or manipulate others. Any conflicts are resolved through bargaining and the outcome depends on how much power a person has developed. Because of the deficit situation, the provincial Treasurer has gathered considerable legislative authority over the accountability process. I noted that both the Minister of AECD and the Treasurer draw far more importance from performance reports as evidence of accountability than they do about the measurements in the report. Their emphasis keeps the focus on an external enemy—the lack of accountability that caused the deficit and high taxes. It is hard to argue for any change without reference to the KPIs. KPIs have caused competition between institutions for students, programmes, and resources. The power to resolve the conflicts will come from demonstrated KPI results. For example, the seeking of new students has resulted in complex transfer arrangements between universities and select colleges, but decreased opportunities for other students to move around in the post-secondary system. Therefore, the bargaining process has shifted away from a scholarly focus and moved toward the KPIs used by the Department.

So, in this case study, we saw a lot of evidence to validate the assumptions that Bolman and Deal argue underlie the political frame:

> The political frame, invented and developed primarily by political scientists, views organisations as areas in which different interest groups compete for power and scarce resources. Conflict is everywhere because of the differences in needs, perspectives, and life-styles among various individuals and groups. Bargaining, negotiation, coercion, and compromise are all part of everyday organisational life. Coalitions form around specific interests and change as issues come and go. Problems arise because power is concentrated in the wrong places or because it is so broadly dispersed that nothing gets done. Solutions are developed through political skill and acumen—as Machiavelli suggested they should be centuries ago in *The Prince*. (Bolman & Deal, 1991, p. 15)

Any new policy causes conflict and creates new winners and losers. Through the political frame, the KPIs appear as a direct mechanism to constrain stakeholder interests. KPIs also appear to have clarified the goals, though the control is so tight that I think it is also fair to say it limits discussion. On the basis of my observations of the accountability initiatives, the KPI project helped the government gain more control over organisational dynamics within post-secondary institutions while appearing to make them more autonomous.

The Symbolic Frame

Here is how Bolman and Deal describe and define the symbolic frame:

> Symbolic managers believe that the most important part of a leader's job is inspiration—giving people something that they can believe in. People will give their loyalty to an organisation that has a unique identity and makes them feel that what they do is really important. Effective symbolic leaders are passionate about making their organisations the best of their kind and communicate that passion to others. They use dramatic, visible symbols that give people a sense of the organisational mission. They are visible and energetic. They create slogans, tell stories, hold rallies, give awards, appear where they are least expected, and manage by wandering around.
>
> Symbolic leaders are sensitive to an organisation's history and culture. They seek to use the best in an organisation's traditions and values as a base for building a culture that provides cohesiveness and meaning. They articulate a vision that communicates the organisation's unique capabilities and mission. (Bolman & Deal, 1991, p. 364)

Aspects of the case that are consistent with the symbolic frame are highlighted in the following paragraphs.

The symbolic frame emphasises rituals through which responsibilities are communicated. Symbols are developed through negotiation, and shared values guide goal-setting processes. Two important rituals have developed around the government's accountability policy. Every winter, the government and its departments renew their three-year business plans. Negotiations for mandates and resources culminate in the Treasurer's budget speech in February. Every summer, government accountability is demonstrated when the Treasurer assembles KPI data from the previous year and presents it in the legislature. Accountability is evidently an important shared value, given the repetition and attentions paid to these events. The government rituals are repeated when AECD reviews business plans and achievements with institutions. Responsibility is passed down the implementation chain in repetitive ceremonies. There is even further evidence of this when we consider the way tuition and financial processes are handled between central administration and deans. KPIs are more important as symbols of accountability than as actual measures.

Actual behaviour of the Department demonstrates the symbolic frame assumption that people are motivated by symbols and celebrations. The Al and Berta metaphor has continued throughout the accountability process. Celebrations have been held for every conceivable sign of financial progress. KPIs have been used to justify budget allocations and processes. Significant effort is put into making applications, and the rewards of funds from the accessibility, learning enhancement, infrastructure, and performance envelopes are followed closely even though there is very little money involved when compared to the base operating grants given to institutions. KPIs are the shared language in this process. The Department has managed to use KPIs to strengthen its image as a facilitator for the post-secondary system. Rather than impose KPIs, it has been able to stand back and through compromises find ways to demonstrate agreement between all of the institutions.

The purpose of communication in the symbolic frame is to tell stories that help individuals develop shared values. Conflicts become opportunities to negotiate new meanings. At every opportunity, the story of regained direction is demonstrated with reference to KPIs. The meaning of KPIs has undergone significant renegotiation during this study. In the early pronouncements of the Treasurer, we see KPIs presented as performance standards for departments to attain. Toward the end of the study, KPIs were used to direct discussions. One example is the final shape of the performance envelope report card. Benchmarks were adjusted, measures varied, and the level of detail reduced until the Department and institutions were satisfied about what a performance report card meant. At the end of the study, I was told of new discussions aimed at trying to define accessibility through institutional co-operation to reduce the competition that has resulted from the interpretation of the accessibility KPIs.

So, in this case study, we saw a lot of evidence to validate the assumptions that Bolman and Deal argue underlie the symbolic frame:

> The symbolic frame, drawing on social and cultural anthropology, abandons the assumptions of rationality that appear in the other frames. It treats organisations as tribes, theatre, or carnivals. In this view, organisations are cultures that are propelled more by rituals, ceremonies, stories, heroes, and myths than by rules, policies, and managerial authority. Organisation is theatre: various actors play out the drama inside the organisation, while outside audiences form impressions based on what they see occurring onstage. Problems arise when actors play their parts badly, when symbols lose their meaning, when ceremonies and rituals lose their potency. Improvements in rebuilding the expressive or spiritual side of organisations come through the use of symbol, myth, and magic. (Bolman & Deal, 1991, p.15)

Any new policy causes a loss of meaning and purpose. Symbols and rituals are important to people in organisations and so it is hard and stressful to let them go. On the basis of my observations of the accountability initiatives, KPIs have become important symbols that have strengthened the implementation process.

Discussion

In chapter 3, I explained how my research paradigm might blind me to important case material. Mazmanian and Sabatier's (1981) model was used as a checklist to ensure that I sought out information about important variables. My initial data collection experiences confirmed the importance of theoretical guidance. The Bolman and Deal (1991) model provided a framework that could help me gather and consider a wider set of case data. The other objective was to test the applicability of Bolman and Deal's (1991) mid-level model to implementation cases. I hoped the model would help me get past my own preconceived biases so that I could view the case from a variety of valid organisational perspectives. The following sections in this chapter summarise my reflections about how well the two research purposes were achieved.

KPI Insights

Many contradictory views about KPIs were discovered and recorded in the preceding chapters. For example, consider the UCC's perspective on KPIs:

> While we must look to common standards wherever possible, it is also important to recognise and value our differences as institutions and to avoid forcing comparisons between and among items that were meant, planned, and expected to be different. Over the years we have been encouraged to evolve as different institutions with different mandates serving communities.
>
> Although many of our commonly applied performance indicators have never been brought to public attention, they do provide valuable information for each university as it moves towards achieving its institutional mission. ... Perhaps it is time to make these measures more public to demonstrate to the people of Alberta that universities are doing a good job and that they are committed to assuring the public of a job well done. (UCC, 1994)

Compare the UCC's perspective with that of the Minister:

> The entire post-secondary system must take note of a new reality: the public expects accountability. Recognising our (AECD) responsibility as part of this renewed emphasis, the Department is proposing a process that will lead to an agreed-upon statement of results for the system and improvements in the way that we demonstrate these results....In making this proposal we have in mind that the provincial treasurer announced in

> his 1993 budget that all departments, agencies and organisations receiving significant government funding will be required to have in place a business plan and specific means to measure results and performance. (AECD, 1993a, p. 17)

These seemed to be evidence of predictable conflicts arising out of the implementation process. If I had stopped and summarised the case findings in terms of the Mazmanian and Sabatier (1981) model, important organisational dynamics would have been missed.

By viewing the case through the four frames developed by Bolman and Deal (1991), more organisational dynamics were observed. The structural frame highlighted how KPIs helped the government and the Department to organise their accountability policies. KPIs provided rational links between each of the organisations in the implementation chain. Realignment of goals throughout the system was reinforced through economic rewards that were logically justified with reference to the KPIs. The structural argument contrasts sharply with the manipulative image that emerged through the political frame. Scholarly values conflict with the immediate economic goals of the government. KPIs changed the arena through which conflict was resolved by shifting emphasis to immediate returns from government expenditures. Power shifted to institutions that could make an immediate impact on KPI outcomes. Visible links between funding and performance were strengthened by the use of KPIs.

More contrasts were detected through the human resource and symbolic frames. The human resource frame emphasises participation and drew attention to the impact KPIs had on the consultation process. AECD and the government used extensive consultation processes to develop their accountability policies. KPIs provided a focal point for those discussions and opportunities to mark measurable growth and agreements. AECD used KPIs to identify areas where they needed to help institutions improve. This contrasted sharply with the judgmental aspects of KPI usage evident through the structural and political frames. Through the symbolic frame, the ritualistic use of KPIs was evident. Regular reporting emphasised beliefs in accountability. KPIs made it easier to negotiate values and identify opportunities to celebrate desirable behaviours that further reinforce the accountability policy.

The use of the four frames has revealed organisational dynamics that are also explored in the psychological literature. Simonson and Straw (1992) have observed very different individual behaviours depending on whether the principal emphasises accountability for outcomes or decision processes. Agents devote energy to justifying past actions when they are asked to account for the outcomes of their decisions. When individuals were expected to account for their decision processes, their energy focused on data evaluation and there was less evidence of personal biases in the decisions made. The human resource and symbolic frames reveal more attention to the decision processes and offer some explanation for positive organisational dynamics. Dysfunctional KPI results are more noticeable through the structural and political frames, which also happen to emphasise organisational outcomes.

Application of the Bolman and Deal (1991) model has increased the number of dynamics that I have been able to notice and consider in the construction of the case study.

Use of the Frames

Bolman and Deal's frames were useful in four ways. They helped me to detect and explore more of the organisational dynamics in the data I collected by using Mazmanian and Sabatier's implementation model. KPIs became the central feature of the Government of Alberta's accountability policy. Consequently, it was hard to distinguish between the implementation of KPIs and implementation of the accountability policy. The four frames emphasise organisational dynamics. Using the frames as an analytical tool made it possible to distinguish between the policy and the use of KPIs in the implementation process. Having achieved this step, I was able to discuss the role of KPIs in the implementation process coherently.

A second benefit of the frames derived from the contrasting dynamics of KPIs in each of the frames. For example, KPIs were manipulative implementation instruments when viewed through the political frame and valuable implementation rituals when viewed through the symbolic frame. The contrasting results are consistent with recent psychological literature about accountability:

> This review underscores the falsity of the conventional wisdom—often born out of frustration at irrational, insensitive, or lazy decision makers—

> that accountability is a cognitive or social panacea: "All we need to do is hold the rascals accountable." Two decades of research now reveals that (a) only highly specialised subtypes of accountability lead to increased cognitive effort; (b) more cognitive effort is not inherently beneficial; it sometimes makes matters even worse; and (c) there is ambiguity and room for reasonable disagreement over what should be considered worse or better judgement when we place cognition in its social or institutional context. (Lerner and Tetlock, p. 270)

Salience of each frame changes depending on the circumstance. For instance, the political frame is more relevant to circumstances that include a sharp decline in resources. Depending on the circumstances, the KPIs will have to be used in very different ways to enhance policy implementation effectively.

Recent scientific research into accountability is pertinent to my findings about the different uses of KPIs. Lerner and Tetlock (1999) have linked information about audience views to how decision makers react to accountability expectations. They found that when a principal (audience) makes his or her views known, agents strategically shift their attitudes to match those of the principal. However, when a principal's views are not known, agents pre-emptively provide accountability information to justify their decisions. They also found that agents made more efficient decisions when the principal's views are not known.

Because public opinion is hard to gauge, Government of Alberta KPIs could be viewed as a pre-emptive strategy to justify government actions to the electorate. However, those same KPIs also make the government's economic views known to AECD and the institutions. AECD's use of KPIs could also be applied as a pre-emptive strategy by the Department to justify expenditures on post-secondary education. However, those same KPIs also inform institutions about the Department's views. When KPIs are viewed from the accountability perspective, the use of KPIs throughout the implementation chain produces opposite effects, because AECD is both a principal in terms of the institutions and an agent in terms of the government. This problem is magnified to the extent that faculties are viewed as agents by university administrations.

The frames also helped me to address concerns about personal bias that arose during preparations for the interviews in the second round of data collection. Fontana and Frey (1994) raised concerns about interviews that I also experienced during my practicum at AECD.

> Many studies using unstructured interviews are not reflexive enough about the interpreting process; common platitudes proclaim that data speak for themselves, that the researcher is neutral, unbiased, and invisible. Data reported tend to flow nicely, there are no contradictory data and no mention of what data are excluded and/or why. Improprieties never happen and the main concern seems to be the proper, if unreflexive, filing, analysing, and reporting of events. But anyone who has engaged in fieldwork knows better; no matter how organised the research may be, he or she slowly becomes buried under a growing mountain of field notes, transcripts, newspapers clippings, and tape recordings. (Fontana and Frey, 1994, p.372)

My initial case report captured none of the conflict and shifts in emphasis that are now included. I was concerned that I could be missing many messages or getting caught up in the interviewee performance (Goffman, 1959). Carefully planned questions helped, but did not address all of the concerns. The four frames helped me formulate probing questions aimed at revealing more of the organisational dynamics. I found that each interviewee tended to work exclusively in one frame. Follow-up questions, grounded in a different frame, often produced uncomfortable exchanges and data that did not seem pertinent to the interviewee when answering the initial question. The four frames helped me and the interviewees systematically reduce personal biases that would have excluded useful data from the case.

A fourth benefit arising from the Bolman and Deal model is the emphasis on organisational dynamics. Organisational dynamics complimented the emphasis of Mazmanian and Sabatier (1981) on policy structure in the implementation process:

> It is more the rule than the exception for policies to go awry as they make their long and meandering journeys from the legislative floor to the target organisations. A literature has developed around the problem of "implementation." Essentially, it portrays a continuing saga of the perverse ways in which policies produce something other than what policymakers had in mind. Policies often create new problems that require new policies—until the time comes to develop a policy of no policies. Then, government can deregulate, and the cycle can begin again. (Bolman and Deal, 1991, p. 8)

Mazmanian and Sabatier relied on the interaction of the independent implementation variables to explain the stages of policy implementation. Their model failed to provide ways to examine implementation in terms of the dependant variables. The frames provided a framework that helped me consider why, for example, actual and perceived policy impacts were different. Such differences pointed to the various perspectives people hold about KPIs depending on which frame they are using.

Summary

Bolman and Deal's model was helpful. Including a discussion of the case in terms of organisational dynamics added depth to the primarily chronological-analytical organisation of the case. As a secondary organisation of the case data, it served to clarify aspects of the case that were hard to appreciate in the chronological format. It helped me discover and discuss the multiple perspectives experienced by respondents. For example aspects of KPI usage that I naturally saw as supportive in a human resource perspective were also viewed a coercive from a political perspective. The model there-by supported significant amounts of additional case analysis. Bolman and Deal's model helped me to counteract personal biases and become aware of data that would otherwise have been missed.

Chapter Eight

Summary, Conclusions, and Recommendations

This chapter is divided into eight sections to provide an overview of the study and the relevant findings. The first sections include an overview of the study and a summary of the case story-line. In the next section the significant findings regarding each of the six research questions are presented. Following that the conclusions, recommendations, and implications of the study are discussed. This is followed with a discussion about KPIs as a performance implementation technique, including my suggestion for revision of the conceptual framework, which guided the study. The chapter ends with my personal reflections about the study.

Overview of the study

The purpose of this study was to explore the use of KPIs as a policy implementation technique. Implementation of the Government of Alberta's accountability policy through KPIs was selected as a case study to consider the research purpose. The specific focus of this study was the KPI project within AECD for the period 1992 to 1997. The following six specific research questions were used to guide the investigation.

1. How was the Alberta Government's accountability policy developed?
2. What was the impact of government policy on AECD policy?
3. How did AECD develop its KPIs?
4. What outcomes did AECD expect from the introduction of KPIs?
5. How did the university sector react to the introduction of KPIs?
6. How do the KPIs as an implementation technique reflect the accountability policy?

The information used to assemble the case study was primarily gathered from public policy documents. Data collection started in 1997 when I was able to undertake a practicum within AECD. This practicum resulted in several drafts of the case story-line which were reviewed by AECD and other knowledgeable peers. This background experience facilitated a comprehensive search and collection of public policy documents. To clarify the developments underlying the public documents four expert interviews were undertaken. Two of the interviews were with officials at AECD. The other two interviews were with university officials involved in the University Co-ordinating Council KPI committees during the time-frame of the study.

These interviews confirmed that no significant documents had been missed and clarified many aspects of the public policy documents.

Established theories were used to guide the analysis and discussion of the case. Mazmanian and Sabatier's (1981) policy implementation model guided my data collection and analysis of the development of the accountability policy. Additional analysis was guided by Bolman and Deal's (1991) model of organisational analysis. The policy documents and the expert interviews occasionally produced seemingly contradictory information. Both theoretical models helped me reflect the multiple realities faced by the participants and reduced the temptation to dismiss conflicting data. As a result a richer description and analysis of the case study emerged.

Summary of the Case Study Story-Line

Prior to the 1993 election, two separate initiatives to define the accountability policy were started, which formed the basis for subsequent implementation initiatives. The Premier's Office developed and released a new economic strategy, called *Seizing Opportunity* (Alberta Premier's Office, 1993). The plan reinforced the new role of government and established measurement standards. The Provincial Treasurer reinforced this approach with a series of consultations that he referred to as budget roundtables, beginning in March of 1993. Out of these discussions, the Treasurer developed the report *A Better Way: A Plan for Securing Alberta's Future*, which was released just after the election (Alberta Treasurer, 1994a). The report was hailed as the first business plan for the government and it included specific goals and measures for each Department, including AECD. However, many of the plans were vague and came with a promise to develop more detail during 1994/95.

Following the 1993 election, four separate initiatives established the accountability policy at the government level. First, Treasury took an active role in shaping Departmental plans by requiring three-year business plans from each Department, and also by tightly establishing the criteria for those business plans. Second, Alberta's Auditor General (AG) added his support through new audit initiatives (Auditor General, 1994). The AG announced an emphasis on comprehensive auditing, which included a careful assessment of the goal-setting process and progress toward goals (CCAF, 1993). The third step was establishment of an annual report card to provide specific information about progress toward the stated goals of each Department (Alberta Provincial Treasurer, 1994a). The fourth and final step was to develop an Accountability Act to elevate responsibility for measurable goals and to report progress into a legal requirement (Alberta Legislature, 1996). The Act also extended the reporting requirements to every institution receiving public funds, including universities.

AECD anticipated the Government's policy direction and published its own policy interpretation, *Accountability Expectations of the Public Post-Secondary Institution Sector* in October 1993. This document indicated AECD would pursue accountability by creating a framework for adult learning and increasing responsiveness, access, and affordability. These goals are reflected in the Department's first business plan. Following the issuance of the 1994 to 1996 business plan as part of *A Better Way*, AECD went about developing its vision for adult learning. Following a limited set of consultations because of the bounds set by the business planning process, a policy document was released in 1994, *New Directions for Adult Learning*. This work clarified the broad accountability goals of AECD: accessibility, responsiveness, affordability, and research excellence.

According to AECD, accountability is achieved when the government and post-secondary institutions take responsibility "for the way in which resources are allocated and for demonstrating to the public that results are being achieved" (AECD, 1993, p. 2). For each of the accountability goals set out for AECD in the 1994 to1996 business plan, specific measures were proposed to justify the resource allocations. It was also clear that these measures would be used to demonstrate the Department's accountability to the public:

> This means demonstrating to Albertans that the post-secondary system is prepared to examine the way in which it is organised and operates, has the capacity to innovate and respond to those it serves, and delivers high quality services in an efficient manner. (AECD, 1993, p. 1)

Within the Department, new initiatives arose to ensure that every post-secondary institution helped AECD to achieve the accountability goals. First, an Access Fund was established to support competitive proposals to deal with problem areas. Second, a project was set up to develop a system-wide set of KPIs to monitor systems and institutional performance. A third group was established to implement performance funding. Each of these initiatives was to be developed in conjunction with the affected stakeholders. However, the consultative process was bounded by deadlines imposed by Treasury. It was not clear whether this was a signal that consultation with post-secondary institutions was not important, or whether the deadlines were to ensure the process was completed in a timely manner.

The origins of the KPI project can be traced to 1992 when the Department issued a discussion paper to the UCC entitled *Performance Indicators and Accountability Measures*. While the paper was discussed, very little progress was made until after the publication of the Department's policy paper, *New Directions for Adult Learning*, in Alberta in October 1993. A four-stage development process was set up, starting with discussions that resulted in a set of measurement goals. An important aspect of the goal-setting stage was the agreement to focus on system outcomes. Stage two involved evaluating KPIs for each of the measurement goals. This process started in 1994. The Internet facilitated an intense discussion between everyone involved. Development was largely directed by committees established by the UCC and that allowed Department officials to act as facilitators rather than leaders. General agreement was reached by February 1995 and was announced in *Institutional Accountability in Alberta's Post-Secondary system: A Progress Report*. Stage two ended with the publication of the first KPI reporting manuals in the fall of 1995.

Stage three and four did not go as smoothly as the first two stages. Stage three was to be a pilot study to work out any problems in the data and the process. Many calculation problems emerged pointing to inconsistent or incomplete data definitions. Institutions also had trouble coping with completing reporting requests from separate branches of AECD. As a result, the information reporting and exchange project, the benchmarking project, and the KPI project were all co-ordinated to reduce the overlap. The reporting manuals were redone in May 1996 and a second pilot was conducted on the 1994/95 data. Stage four was to include sharing of the KPI information and design of a KPI report to be used for the 1996/97 data. The UCC asked for more time to study the measures. Such a delay was not possible because of the commitments the Department had made to the Treasury Board to institute a degree of performance funding. There was some conflict over this and the Department assumed more leadership by directly negotiating with institutional representatives.

During stage four, emphasis shifted to applications of the KPI data and away from the direct development of the KPI project. Emphasis shifted to designing a mechanism for the performance envelope. There were also a number of measurement issues that had been set aside in early stages so that timely agreement could be reached. Discussions were started about non-credit activities how to measure co-operation between institutions in the post-secondary system. At the end of the study a new KPI advisory board was being set up to guide the ongoing development of the project. Even though there has yet to be a detailed public KPI report, the Department reports satisfaction with the progress made. I was told of several situations that demonstrated KPI was being used by institutions to produce better system-wide results.

Major Findings

Understanding the policy context of the research findings is important. The institutional framework (government, AECD, universities, colleges, faculties) of the higher education system has a strong influence on how the policy process operates. Brook (1989) points out that the delegation of education to universities has political advantages for society, but leaves the government with only indirect control mechanisms, such as board appointments. Epstein (1983) and others have identified measuring as an important two-way communication tool in such circumstances. First, requiring measurement symbolically shifts responsibility to the university. The measures also give the university a legitimate way to structure their activities for public reward. This process in Canada, according to Aucion and Bakvis (1988), can be traced to the 1960 Glassco Commission. That Commission foresaw a need for a performance emphasis in public policy, and suggested Canadian governments can be more responsive and responsible by moving management of programmes out to agencies. Similar perspectives, known as New Public Management, were adopted in the United Kingdom and New Zealand. The accountability policy adopted by the Government of Alberta is consistent with these developments in policy analysis.

Universities are public institutions in Alberta and are structured to defend certain historic principles of learning, not to adapt to rapid change. Post-secondary institutions, therefore, have largely independent boards to carry out their mandate. In Alberta, post-secondary institutions are also dependent on the government as the largest single source of operating revenue. This dependency creates an opportunity for implementation conflict. According to Birnbaum (1989), "the allocation decision is primarily a political one of who gets what, when, and how, and in a democratic and pluralistic organisation, political processes are appropriate means for resolving such political issues" (p.136). The politics within a post-secondary institution and the wider political environment influence post-secondary accountability discussions.

This investigation into the use of KPIs to implement a government policy included consideration of the impacts on post-secondary institutions. In the language of Pal (1997), the institution and its faculties are the final agency in the implementation chain. As the agency providing education services to students, each institution and faculty has its own managerial and control systems. According to Zeibell and DeCoster (1991), the broad purpose of control is to monitor and guide actions so that the policy goals set out for the organisation are accomplished. The institution and faculties are also expected to consider their self-interests in the process of interpreting and implementing policy. The post-secondary institution as the delivering agency has the ability to customise its offering to best accomplish the policy goals established by government and AECD. Self-interest could also lead to an unnecessary dilution of policy intentions, so the incentives for responding to policy merit were considered in the literature search.

As the study progressed, I was able to group the research questions into four categories. The following four subsections of this chapter describe the major findings associated with the six research questions.

Implementation

The first two research questions were, **"How was the Alberta Government's accountability policy developed?"** and, **"What was the impact of Government policy on AECD policy?"** The Mazmanian and Sabatier (1981) model was useful in addressing these questions. Distinguishing between independent and dependent implementation factors promotes more diligent data collection and was an organisational tool for initial data collection. In this case the government manipulated all three independent factors to produce a very strong implementation incentive.

KPIs proved to be very useful in the manipulation process. Public support and media attention was focused on the government's construction of the policy problem by the KPI data it presented. The KPI data also served to highlight the significance of the problem and clarify exactly what was intended. Through legislation, the KPIs were linked to financial resources, and decision rules for the implementing agencies were made very clear.

The policy did not make an impact on AECD and post-secondary institutions in a measured sequence of events. AECD responses came in advance of government policy on several occasions. There was also evidence of changes in institutional behaviour in response to KPIs before they were implemented. Policy intentions are an important implementation force because players in the implementation chain have informal as well as formal communication channels. Given the strong impact of intentions, policy makers must be very careful about what they discuss or what they indicate they are considering because implementation agents are likely to immediately guess at the policy implications. AECD worked with the government to shape the policy impacts at AECD. Government policy was modified so that the Department's traditional role of facilitator and system advocate was preserved and integrated into the new accountability structures. Although the government and AECD emphasised different aspects of accountability, by acting together they increased the sources of pressure on post-secondary institutions to respond to the accountability policy. The close interrelationship between policy formulation and implementation draws attention to the need for administrators to treat them as two interrelated processes rather than as processes that are connected by separate administrative stages.

The focus of the KPIs affected the impact of the government's and Department's accountability policies. An important aspect of the government policy was evidence of performance-based funding. This emphasis led to the formation of a benchmarking project in the Department to develop standards to make a performance funding envelope operational. The government's performance funding expectation and deadline was met. To meet the government's criteria, compromises were made to obtain the needed agreements with institutions to implement the performance envelope. However, the financial effect of the fund was negligible because the amounts at risk were small and the dominant performance driver, enrolment, was the same as the existing funding system.

The significance of the KPI focus can be seen in two other examples. The enterprise revenue KPI was focused on outcome. It directed institutions to increase the percentage of revenues arising from nongovernment sources. Institutions responded with an amazing variety of successful strategies, including non-credit instruction, increased facility usage, direct research partnerships with the private sector, and cost recovery programs. The access KPI was focused on an input, though it was not labelled that way. It directed institutions to maintain and increase current registration levels while funding and the number of new high school graduates were dropping. As a result, admission standards were adjusted and competition for students in the system emerged. Long-term development processes to produce attractive new options for students were not measured nor were they evident. These examples illustrate the time lags necessary to see impacts from a new policy.

KPIs increased institutional attention on implementation impacts that could be achieved in the short term. This may have been a goal of the government because it was eager to be seen as responsive. What is meant by an outcome was affected by the type of KPI selected to measure the outcome. Administrators can, therefore, clarify and direct the nature of the implementation efforts made by policy agents through careful selection of appropriate KPIs.

Organisational Dynamics

The third and fourth research questions were, **"How did AECD develop its key performance indicators?"** and, **"What outcomes did AECD expect from the introduction of KPIs?"** The Bolman and Deal (1991) model proved to be a helpful and useful analytical tool. Each of the four frames brought a different set of organisational dynamics into focus. Asking questions from each of the perspectives brought information to light that would have otherwise been missed. For example, one interviewee was committed to a political view of KPIs and the accountability policy. However, probing questions from the human resource frame resulted in data regarding what AECD expected from the introduction of KPIs that would not have otherwise been included in the study. Recapping the case four times through the frames emphasised the ambiguity faced by administrators that I was not able to capture through the chronological report format. The switch to organisational rather than individual behaviour theories typically used to analyse implementation cases was, therefore, a success.

The political and structural frames provided insight into the government actions as they related to AECD's KPI project. The political frame focuses on alignment of power between organisational groups. KPIs appeared to be coercive, reducing the power of stakeholder groups, because of the exclusive focus on government goals for the publicly funded post-secondary system. Manipulative funding arrangements were made easier because KPIs could be used to justify performance funding. The structural frame is compatible with the use of KPIs because it emphasises rational processes and co-ordination. From the perspective of this frame, KPIs helped communicate the Department's goals to post-secondary institutions. Institutional decision making could be objectively measured and the results appropriately rewarded. Some participants saw KPIs as a way to introduce market mechanisms into resource allocation decisions. Through the political and structural frames, we see that KPIs are used to help the government align the goals and operations of post-secondary institutions with the economic agenda of the government.

A different picture of the development process and AECD expectations emerged through the symbolic and human resource frames. The symbolic frame focuses on rituals to establish responsibilities. When viewed through this frame, the cycle of business planning and KPI reporting is an important shared ritual. The carefully designed KPI development process can be seen as an attempt to produce shared values. As symbols of shared values, the KPIs provide a mechanism for decision making and negotiation between the Department and post-secondary institutions. The human resource frame emphasises participation from the assumption that people are motivated by opportunities for personal growth. KPIs were developed by the post-secondary institutions with the Department acting primarily as a facilitator. Significant amounts of time went into the benchmarking project. When viewed from the human resource perspective, the Department's attention to how KPIs would reflect on institutional performance is evidence of a desire to help post-secondary institutions improve. The human resource and symbolic frames reveal how KPIs provided the Department with a tool to support and encourage institutional development.

Bolman and Deal's model (1991) provided a way to examine the development of KPIs and the outcomes expected by the Department from a variety of perspectives. Each frame emphasised a different aspect of organisational dynamics. From the case data, it can be concluded that KPIs are an effective, coercive tool that the Department used to make the system more responsive to the government's economic agenda. The same case data can also be used to demonstrate that the Department, to support discussions about how to encourage better post-secondary system outcomes, used KPIs. Such contradictory conclusions reflect the situational ambiguity that administrators face every day.

Managers must align KPI usage with other aspects of their leadership to ensure they are effective. A small set of KPIs would not reflect the natural ambiguity that occurs in organisations. KPIs played a role in all four frames, so managers cannot assume that administrators will attach the intended meaning to KPI usage. For example, both positive and negative attributions could be made about AECD's reasons for using KPIs. The negative attributions, if not intended by AECD, would therefore reduce the expected effectiveness of KPIs in the policy implementation process. Bolman and Deal's model can help managers detect KPI attributions that are not consistent with their policy implementation intentions.

Post-Secondary Education

The fifth research question was, "**How did the university sector react to the introduction of KPIs?**" Reaction was universally negative, from grudging acquiescence to paranoia. The following quote, taken from Emberley's book *Zero Tolerance: Hot Button Politics in Canada's Universities*, summarises the typical reactions that I encountered during this study:

> Heightening the discord on campus and the confusion regarding the purposes of the scholarly culture is the plethora of new schemes devised to deconstruct and reconstruct the image of the university. These new schemes—accountability models, rationalisation plans, partnerships, with colleges and business corporations—are not linked directly to the litigiousness of the academic community and the swell of enthusiasm for post modernism throughout the university. But they are linked indirectly because they reinforce the idea that the university as an institution, and

> the complex tension of needs and longings it embodies, is an utterly arbitrary artifice that can be re-engineered at will. Never mind that the university has a tradition of eight centuries during which its practices were refined to the present state. Ignore the fact that the university has persevered against innumerable attempts to suppress its commitment to non-partisan inquiry and to deny the critical distance essential to independent mindedness. Taking aim at only the surface, and apparently ignorant of the tangle of expectations that the university has traditionally attempted to meet, those who have decided to expose the university's affairs to public opprobrium and to clean house are contributing to the decay. Maclean's has led the pack. (Emberley, 1994, p. 114)

The negativity and resistance surprised me. It is hard to imagine how universities expect they will garner increased public support by complaining about a lost birthright. As an academic, I expected to find more leaders like Dr. Howard Tennant, past president of The University of Lethbridge, who publicly embraced the accountability policy and KPIs as a new opportunity for his scholarly community to grow.

Five types of negative reactions to the KPIs were discovered. The first reaction was to point out how commercial and market forces reduce the emphasis on traditional scholarly values that have made universities so successful. A second critique was to emphasise that KPIs can be a useful internal management tool, but are not applicable to guiding the policy decisions of scholarly institutions. As autonomous institutions, universities also pointed out that KPIs interfere with their governance processes. The fourth critique concerns the risk that the selected KPIs will provide unintended incentives. Economic impact studies were used as a fifth critique to demonstrate that money should be provided with few specific requirements because of the positive return university makes for society as a whole.

I was repeatedly told by university officials that they do not make use of KPI data. This contrasted sharply with opinions and evidence provided by the Department officials I interviewed, and it prompted careful follow-up. When asked about a specific KPI, the university officials I interviewed were able to identify the changes in programming and operating procedures that the KPI prompted. However, they tended to view the changes as a cosmetic nuisance—not evidence of KPI usage. The KPIs attached to the accessibility envelope appeared to be the most controversial in terms of impact. Further study is needed to evaluate if the operating reactions to the KPIs were really cosmetic or substantial.

The universities had ample opportunity to use the introduction of KPIs to improve the scholarly community. AECD invited both CAFA and the UCC to participate in the development process. The case data revealed that these groups failed to take the opportunity seriously. Very few senior officials were involved in the process, and over time the leadership void was filled by the Department. Given the strong policy flow, I wonder if more might have been gained if KPIs had been enthusiastically embraced and then moulded to reflect the scholarly values of the institutions.

Conclusions

Based on the findings of the study, the following conclusions were drawn:

1. The policy environment made it easy to achieve a successful implementation of the Alberta Government's accountability policy. In terms of Mazmanian and Sabatier's (1981) policy implementation model the policy faced favourable tractability, statutory and non-statutory independent implementation variables. The Alberta Government appeared to take deliberate and successful steps to increase the statutory and non-statutory influences for favourable implementation. KPIs increased the degree of favourable non-statutory influence over the implementation process. The result was extensive implementation activity in both AECD and post-secondary institutions.

2. The Government's accountability policy had a direct impact down the entire policy implementation chain. The direct impact was obvious through the implementation of KPIs, business planning, and performance funding of AECD and the post-secondary level. In addition to the intended accountability improvements the use of KPIs had unanticipated consequences. At the operational level universities have become far more commercial and competitive. At the administrative level there is some evidence of more attention to legally manipulating records in order to obtain highest possible KPI scores.

3. Bolman and Deal's (1991) mid-level model of organisational dynamics was a useful case analysis tool. Their model helped me identify and describe contradictory perspectives concerning specific aspects of the implementation process. The organisational dynamics of this case study were complex. For example, the same steps taken by AECD to reflect a human resource model in

their accountability relationship with universities were regarded as coercive and evidence within political model used by some university administrators.

4. AECD is both an principal and an agent in the implementation chain. Actions required of AECD to meet the reporting requirements to the government did not also match the processes it was developing with the universities. The accountability process was very open, allowing the universities access to significant portions of the accountability reports of AECD. This introduced confusion and suspicion into the process with the universities.
5. There was a deliberate effort by the AECD KPI project team to separate the development of KPI measures from the efforts to develop benchmarks and other mechanisms that would allow those with access to KPI data to make judgements. Throughout the case the agents in each of the accountability relationships struggled with this separation. A great deal of trust is required between the agent and the principal in an accountability relationship to deal with performance measurement and judgement processes separately.
6. The reaction of the university sector to use of KPIs to implement the Alberta Government's accountability policy was negative. Their reaction to the KPIs led to increased attention to other accountability processes, such as governance models, public reports, budget processes. Through this defensive spill over effect, KPIs elevated the attention of the sector to accountability issues.
7. It took a lot more time and resources to develop the KPIs than any of the participants anticipated. AECD had to repeatedly extend the deadlines and development processes because of the measurement complexities that were encountered. The number and extent of changes required to information systems to gather the information required for the KPIs were consistently under estimated and proved to be very expensive for the universities.
8. Throughout the early stages of the KPI project the university sector, through the UCC, openly resisted the development process. Their resistance resulted in the UCC being marginalised in the KPI development process. The KPI project was an integral part of the Alberta Government's accountability policy. By resisting rather than working with the Government's policy direction the university sector

had less influence over the later stages of the implementation process such as the development of the performance funding mechanisms.

9. The KPIs developed by AECD had an immediate impact on university operations. Without any specific action by university administrations it was evident that deans and other administrators were using the KPIs to shape program and funding proposals. The KPIs acted like an invisible hand that increased the ability of AECD to get the system to respond to its priorities. KPIs are very visible to everyone in the implementation chain.
10. Defining measures that captured the intended long term quality objectives was difficult. Many dedicated and skilled administrators struggled throughout time covered by this study to design measures that would capture the agreed upon aspects of quality education. Despite these efforts there was general agreement that the measures are not perfect. Actions that were desirable to achieve long term results are hard to assess over the short term. There is an obvious temptation to engage in short term opportunistic behaviour that can only be regulated through the use of other accountability processes.

Recommendations and Implications

The following recommendations for administrative practice and theory are put forward based on the findings and conclusions of the study. A discussion of the possible implications of each recommendation is included.

1. Administrators should plan to address the independent implementation factors in order to ensure the most faithful and consistent implementation of a new policy. I recommend policy administrators use KPIs to increase the influence of non-statutory factors on the implementation process.

Implications: This study demonstrated the importance of the independent implementation variables identified by Mazmanian and Sabatier (1981). If the Government of Alberta had not introduced KPIs the accountability policy of the Alberta Government would have resulted in less implementation activity by AECD and the university sector. KPIs should be included as an integral part of all policy implementation plans.

2. I recommend that administrators take steps to monitor the impact of KPI usage at all levels of the policy implementation chain.

Implications: In this study it was evident that as the Alberta Government's accountability policy was passed down the implementation chain the measurement decisions became more complex and expensive. KPIs cannot capture all the nuances of a policy direction. Without monitoring the impact of the selected measurements would allow for undesirable manipulation or incorrect short term assumptions about long term policy intentions to be established.

3. Organisational dynamics are not viewed uniformly by every agency in a policy implementation chain and so I recommend Bolman and Deal's (1991) four frame model as an effective way to analyse implementation cases and to anticipate implementation issues.

Implications: Each agent in an implementation chain faces unique circumstances. The every agency will have it's own perspective concerning new policies that will reflect the assumptions found in one of the four frames. If administrators do not reflect on how the other agencies in the chain view policy initiatives they could make harmful errors when deciding how to regard the policy initiatives.

4. Whenever KPIs are used as a policy implementation tool the measurement and performance evaluation processes should be clarified together.

Implications: In this study I found that KPIs are very transparent in that they become widely know by everyone in the implementing agencies. While it is theoretically possible to say selecting and using KPIs are separate issues that is not consistent with the behaviours I observed. My recommendation implies that expensive up-front research into both the measurement and what are appropriate benchmarks is needed before the announcement of any KPI. Any attempt to skip both aspects of KPI research will result in either suspicion by the implementing agencies or inappropriate short-term interpretations about what outcomes are desired.

5. The type of KPIs used should be matched very closely to the intended response by the implementing agencies. If the principal's goal is a creative response the KPI must focus long term outcomes. KPIs focused on specific processes and

outputs should be used to induce specific policy compliance as they project the principals intentions.

Implications: The response of agencies to KPIs is not uniform. KPIs that focus on long-term outcomes allow room for experimentation and induce increased accountability reporting as a justification of the activities undertaken. Appropriate measures for desired outcomes are very hard to create. While it is easy to measure processes and obvious outputs of agencies the temptation should be resisted as these types of KPIs will induce strict compliance and manipulation of existing activities. It is not always obvious how an agency will regard a KPI so a lot of care must be taken to clarify what is intended and to ensure the KPI reflects the principal's intentions. KPIs limit the autonomy of every agency in the implementation chain and so what types of responses that will be restricted by the selection of specific KPIs must be understood in advance.

6. I recommend KPIs only be used for important policy initiatives that apply throughout an organisation and its implementation chain.

Implications. KPIs are no longer regarded as a feedback mechanism. They are a very efficient signal to everyone in the implementation chain about what is important. There efficiency extends to the speed with which the intended policy directions spread through the implementation chain. Therefore the standard of care required to avoid costly harm to the principal's organisation and all of it's implementing agencies is increased. Because KPIs are specific they do limit the autonomy of everyone in the implementation chain and provide a very defined focus. It would be very easy to exhaust the resources of an organisation if new KPIs were frequently announced in addition to creating great deal of unproductive administrative stress and confusion.

Discussion about the case and KPIs as a Policy Implementation Tool

The size of the accumulated debt of the Government of Alberta in 1992 was not well understood, perhaps because the debt developed quickly and during a time when the economy looked fairly prosperous. Until the mid-eighties, Alberta enjoyed low taxation and balanced budgets. An unexpected long drop in oil prices led to deficits, which rapidly increased to $2,120 billion in 1991/92 and $3,855 billion in 1992/93 (Perry, 1997). Ralph Klein started his term as premier in 1993. Alberta's 1992/93 deficit was 25% larger than Ontario's deficit in relation to gross domestic product and 40% higher than the national average (Perry, 1997). This deficit situation was far worse than in any of the Maritime provinces, generally regarded as the poorest provinces in Canada. The resulting political discourses contributed to intense public interest in Alberta's fiscal situation (Taft, 1997).

Premier Getty started building the backbone of an accountability policy in 1992. The government gathered together groups of Albertans to solicit their ideas. The discussions helped increase public awareness of accountability issues, even though the participating groups were carefully engineered (Lisac, 1995). A summary of the discussions was published as the *Simpson Report* in 1992.

The *Simpson Report* established an important initial tenet regarding government accountability by reporting that Albertans wanted government to manage the policy process. Rather than deliver services directly, government would establish clear expectations for service agencies and then closely and publicly monitor their operations. This process contrasts sharply with the expectation that a government will manage issues. The influence of books such as *Reinventing Government* (Osborne & Gaebler, 1993) is evident in the *Simpson Report*. Government is becoming more entrepreneurial through the separation of service delivery from legislative responsibility (Brook, 1989). This philosophy, referred to as new public management, was quickly adopted by the Alberta Cabinet (Evans, 1997), along with mechanisms to show that the government was holding the agencies accountable.

Alberta's situation and policy decisions combined to provide a case-study opportunity to examine KPIs as a policy implementation tool. KPIs were to be an integral part of the government's accountability policy. The deficit situation made the accountability policy a high priority of the government. A summary of the research design, case study story line and a revised conceptual process were discussed in the following sub-sections.

I examined six sets of literature that were selected on the basis of their connection to the research topic. Literature about the policy context, development of the Government of Alberta accountability policy, policy implementation models, management control literature related to change management, impacts of change on organisational behaviour, and accountability were reviewed. The review resulted in the preliminary conceptual diagram, presented in Figure 2.1, which was used to structure this study.

Policy context is important to the study because of the interrelationship between policy formulation and policy implementation (Pal, 1997). Prominent policy writers consistently suggest that policy systems arise out of three elements: policy stakeholders, policy environment, and public policy (Dunn, 1981; Dye, 1978; Pal, 1997). Changes in the political environment are modifying the way policy analysis is approached (Osborne & Gaebler, 1993). According to Pal (1997), three important changes are occurring. First, government is expected to provide the governance mechanism, but not to actually run things. Linked to this movement is a trend toward smaller government. Finally, there is a postmodern attack on the rational tradition of policy analysis. However, the changes in the political environment have not changed the basic need for policy analysis. All three of the aforementioned changes are resulting in an increased use of independent agencies to carry out policy. As the number of organisations in the policy implementation chain increases, so does the importance of communication to link the organisations together.

Policy establishes a contract, which links together the organisational community that will interpret and implement the intended policy impacts. The broad purposes of each organisation arise from established patterns of interaction and policy development. Bourdieu (1993) discusses the deep-rooted symbolic capital that develops around the way we organise social activity. He describes the intense reactions that follow when someone tries to betray the symbolism underlying established relationships. Schein (1985) identified this same phenomenon as a psychological contract. Even modern scholars who support the scientific management approach, such as Perrow (1986), recognise the importance of consistent human relations and political contexts in management processes. These mechanisms act like "glue" to help protect an organisation from fleeting fads and give managers a way to thwart any policy that is perceived to be ill-conceived. The same glue makes it difficult to bring an organisation's behaviour into line with a new policy direction. As a consequence, the popular management literature is full of techniques on how to implement transformational change. Implementation cannot therefore be taken for granted.

Several dominant models of policy implementation exist. Mazmanian and Sabatier (1981) developed a conceptual model around independent variables such as policy, structure, and tractability, and dependant variables that represented the situation within the implementing agency. Jenkins' (1978) model emphasises circumstances in implementing agencies. Mitnick and Backoff (1984) base their model on agency and communication theory. Goggin (1990) bases his model on communications theory. More recently, Pal (1997) echoes management practice in the Federal Treasury Board (1995) and Alberta Treasury Departments (1994a) by modelling implementation around the selection of a series of management techniques used to hasten progress toward a stated goal or policy direction.

Mazmanian and Sabatier (1981) produced the first book devoted exclusively to policy implementation. They developed an implementation model to explain the implementation processes that they observed through six public policy case studies. As a starting point, they divided the factors involved in implementation into independent and dependent variables. The independent variables are factors external to the implementing agency. These variables include structural power through mechanisms like funding, attitude of related parties to the policy, and tractability. Tractability means the amount of change needed in relation to available technology and affected groups. Mazmanian and Sabatier identify the dependent variables as those factors related to the implementing agency. Agencies recognise the difference between compliance with policy and compliance with policy outputs. They also distinguish between perceived and actual impact. Because of the public policy emphasis and the wide use by other researchers, I adopted the Mazmanian and Sabatier model for this study.

Accountability is more than a policy adopted by the Government of Alberta. Consideration of the broader social context of accountability places Alberta's policy and related initiatives in a more meaningful perspective. In an attempt to summarise the meaning of the term accountability from the current literature, Patton observed:

> In most settings one party (individual, group, company, government, organisation, etc.) is said to be directly or indirectly "accountable" to another party for something, action process or outcome. ...However, the precise meaning and implication of the concept of accountability are often left unclear. (1992, p. 166)

An important reason for the lack of precision is the controversy that erupts when stakeholders are asked to agree on specific responsibilities (Dennison, 1998). Given the variety of stakeholders in the post-secondary system, consideration of relevant post-secondary accountability literature was important.

Accountability is the process through which two parties communicate about how they have carried out their responsibilities toward each other (Lerner, Goldberg, & Tetlock, 1998). Annual reports and financial statements are vehicles through which management is held accountable for the stewardship of shareholder capital. The Government Accounting Standards Board (GASB) has asserted the public sector will demonstrate accountability by

> being obliged to explain one's actions, to justify what has been done… accountability requires governments to answer to the citizenry—to justify the raising of public resources and the purposes for which they are used. (GASB, 1987, p. 21)

The Government of Alberta was more specific in its definition of accountability following the 1993 election. According to the Auditor General:

> Accountability is an obligation to answer for the execution of one's assigned responsibilities....The basic ingredients of successful accountability relationships are as follows: set measurable goals and responsibilities, plan what needs to be done to achieve goals, do the work and monitor progress, report the results, evaluate results and provide feedback. (Alberta Auditor General, 1994, p. 1)

These definitions illustrate the general components of the communication that is needed to demonstrate accountability.

Lerner and Tetlock (1999) investigated accountability systems for characteristics of the principal audience. They learned that if the audience's views—in our case the Government—are known, then creativity will be stifled. The agent has no choice but to match or restructure tasks to demonstrate compliance through whatever measures are used. All the power in this relationship shifts to the principal. If the principal's views are not known, then the accountability interest shifts to the agent. In this case, accountability reports are used as defensive weapons against criticism by clearly defining the goals. The agent feels free to try creative approaches because the actions are justified by the accountability criteria the agent has presented. Lerner and Tetlock concluded that the use of specific performance measures—which by their nature serve to clarify the audience's views—will have a strong impact on the way the agent approaches the accountability process.

Laughlin (1990) summarised the accountability literature in diagrammatic form, as presented in Figure 2.1. The agency relationship between the principal and the agent is mapped out in the middle of Figure 2.1. Along with the transfer of responsibilities are the related demands for information, as depicted along the top of the figure. The agent, in addition to responding to the transfer of responsibility, will supply to the principal a flow of information, as depicted along the bottom of the figure. Specific accountability mechanisms will grow out of the relationship about the transferred responsibilities as demands and responses accumulate in the flow of information.

The case study is commonly used to investigate implementation in complex situations. This pattern began with the Pressman and Wildavsky (1979) investigation into the failure of a new federal housing policy to make an impact on conditions at the end of the implementation chain. Federal policy and money was passed down, eventually reaching the local Oakland California housing authority, but conditions did not improve. Since Pressman and Wildavsky, the case method has dominated policy implementation studies (O'Toole, 1986). The modern use of the cases follows the pattern of case methodology in traditional philosophy and social research. It also thrives in modern professional schools because it is a highly effective method of capturing important human experiences. Although knowledge may be separated from experience, balance is best achieved when the two are linked.

The case method preserves a situation so that the researcher and subsequently others can test multiple theories and interpretations. Yin (1994) built on that argument to justify the case method:

> The distinctive need for case studies arises out of the desire to understand complex social phenomena. In brief, the case study allows an investigation to retain the holistic and meaningful characteristics of real life events—such as individual life cycles, organisational and managerial processes, neighbourhood change, international relations and the maturation of industries. (Yin, 1984, p. 14)

The case method primarily helps us to understand complex social phenomena because the holistic and meaningful characteristics of real life events, individual life cycles, and organisational and managerial processes are retained. Given the relatively short history of implementation studies, O'Toole (1986) also suggested that the case study should be the investigative method used for policy implementation studies to support comprehensive theory development.

Three established models were used to guide this research. To appreciate the significant elements of the accountability policy, Dunn's (1981) policy analysis model was used. Mazmanian and Sabatier's (1981) policy implementation model was used to guide and organise my research about the implementation of the accountability policy and the use of KPIs. Bolman and Deal's (1991) model of organisational dynamics was used to guide the case development and analysis. By making use of established models, I was able to identify important elements that might have been missed otherwise. The models established a firm base from which I conducted this research project.

The primary source of data for this study was analysis of public documents. Four interviews were conducted with Department and university officials that were involved in UCCs responsible for the KPI project. A preliminary version of the case report was completed after a practicum in AECD. After feedback on the case, a second round of data collection was conducted. Mazmanian and Sabatier's model was used to predict expected outcomes and this served to draw attention to unexpected actual outcomes. Interviews were also conducted at this stage to confirm my understanding of the documents and that the document list was appropriate. The final copy of the case went through several redrafts to ensure that the chronological and organisational factors were dependably presented.

Ethical considerations were an integral part of this study. The research plan was reviewed by an ethics committee to ensure compliance with the University of Alberta guidelines for research involving human participants. Each step of the research was guided by established models for this type of research to enhance the validity of the research. The research was conducted under the guidance of a supervisory committee with substantial experience with the case and subject area. Data collection and drafting of the case report continued until there was evidence of data saturation. Each interview provided some additional information and also confirmed the trustworthiness of the case analysis. Interviewees were provided with questions and a document analysis in advance of the interview. The interviews were transcribed and reviewed by the participant. By starting with established protocols and then carefully advancing this investigation into KPIs as a policy implementation technique, I am confident the findings are credible and dependable.

Revised Conceptual Framework

A conceptual framework regarding the use of KPIs as a policy implementation technique was developed to guide this study and was presented in Figure 2.2. Now that the study is complete the conceptual framework has been revised to incorporate my findings.

With reference to Mazmanian and Sabatier's (1981) model, KPIs had a significant influence on the implementation of the accountability policy. Even though there were a number of organisations in the implementation chain, the KPIs had a direct and therefore faster impact on all levels of the implementation chain. This made the whole system more responsive to government policy. KPIs behaved much like Adam's invisible hand that guides economic decision making. As a result, feedback mechanisms are less important sources of management information. Bolman and Deal's (1991) model pointed to the effect that KPIs have on organisational dynamics. How KPIs are regarded will depend on the organisational paradigm the affected managers are using. This case demonstrated that KPIs had both positive and negative impacts on the implementation of the accountability process.

The results of both sets of analysis point to KPIs as an effective implementation tool. KPIs have accelerated the implementation cycle. Increased speed poses some dangers, however. The slow passage of policy down the implementation chain made it possible to detect and adjust policies in response to negative outcomes before they passed to every agent. If KPIs are used in the implementation process, greater care must be taken in the policy formulation stage. When KPIs are used, policy makers can expect policy formulation and implementation to become more of a simultaneous process.

These findings have implications for the conceptual diagram for the study presented in Figure 2.2. KPIs need to be shown as a significant additional policy and implementation procedure. Showing the direct impact of KPIs on each stage of the implementation process has done this. The reduced importance of feedback from the implementation impacts on institutions outcomes also needed to be demonstrated. To show these changes, the lines representing the feedback process have been made smaller relative to the other processes. The impact of this change is reflected in my research conclusions. Following is the revised conceptual diagram:

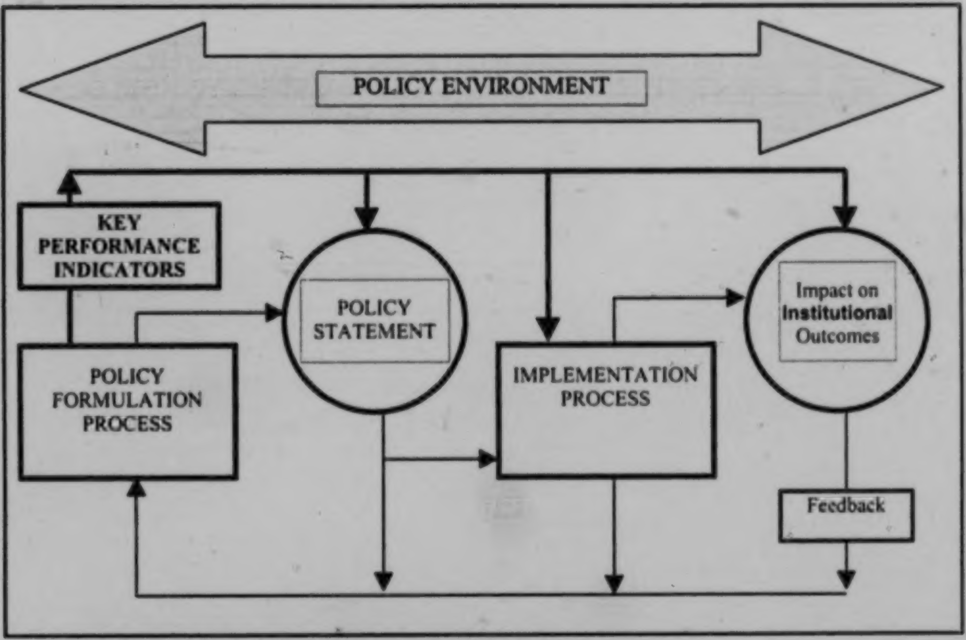
POLICY ENVIRONMENT
KEY PERFORMANCE INDICATORS
POLICY STATEMENT
POLICY FORMULATION PROCESS
IMPLEMENTATION PROCESS
Impact on Institutional Outcomes
Feedback

Figure 8.1. Policy implementation with KPIs

The revised conceptual diagram shows the dominant impact of KPIs on all aspect of the implementation process. However this impact is not linear. The revised framework shows KPIs simultaneously impacting all aspects of the policy implementation process. The non-linear aspects of policy implementation are increased by the use of KPIs. For example, the feedback from institutions affected the number and type of KPIs that were ultimately used by AECD. This is reflected in the double feedback loops added to the revised framework and highlights the dominant impact of KPIs on all aspects of the policy implementation process.

Personal Reflection

When I started an MBA in 1994 the need for performance measurement to establish and demonstrate accountability was a regular topic of classroom discussion. KPIs had become a symbol of good management within my first profession of accounting. While I was fascinated by the possibility of quantifying performance, I was also uncomfortable with the change in attitude I saw the concept having on my colleagues. The KPI process seemed to become more than an additional source of information that accountants could provide to support the work of decision makers. It was the exploration of those concerns that led me to undertake this qualitative study as part of my PhD programme.

As a management educator I have tried to emphasis the pervasive and invisible impact of decisions made in accounting departments on the life of organisations. My purpose has been to elevate accountants and non-accountants concern about their impact on administrative processes. In my career two examples have always stood out. First, it is quite common for organisations to leave decisions about cost classification to the accountants. However, fundamental decisions about whether to group costs by type of input or type of programme is a fundamental construction of information that managers use. If costs are grouped by inputs then every manager in the organisation is prejudiced into viewing operating questions from that perspective. A manager cannot really view an organisation from a programme perspective unless decision making information is prepared to support that perspective.

The second example has to do with the impact of the accountant's opinion regarding financial outcomes. Early in my career I was a Chief Financial Officer for a small company. Following my first quarter end the President came to my office and asked me how we had done, to which I replied, "we made $100,000." The question and the answer were repeated several times, with increased interpersonal frustration before I realised the number really meant nothing. At that stage I reported to the President that while we made $100,000 the budget for the quarter was $130,000 and so I thought we had not done very well. My second quarter produced almost the same income for the company and in anticipation of another inquiry from the President I did more research. When he did arrive I was able to report we made $30,000 less than expected but that this was really a great outcome because of rapidly deteriorating market conditions and increased competition. In the first instance the President had reacted quickly to whip everyone into shape and in the second instance he went out of his way to congratulate his staff and look into ways of adjusting to the new conditions. In reality the market was the same both quarters—all that had changed was my attitude but what a difference that made to the lives of all the managers in the organisation. Both examples helped me understand the unseen yet ethical importance of my attitudes on the accountability process.

KPIs are obviously quantitative and have therefore been largely delegated to financial officers in my experience. I was surprised by the degree of immediate impact KPIs had on AECD and on universities. At the same time the impact was subtle and implicit. Do the values of financial officers always align with the leadership of an organisation? I suspect they do not. Accountability is a desirable administrative factor. However the question for administrators to consider is who are we accountable to. Financial officers are trained to be accountable to a narrowly defined group—that is the providers of financial capital. There are many other ways to define accountability that may be more useful to society as a whole. I worry that leaders will increasingly lose sight of their broader accountability responsibilities if they do not activity manage the use of KPIs. This study has shown KPIs have a great potential as a policy implementation technique. Leadership can benefit from the wise use of KPIs but the directions of organisations can also be displaced by those diesigned KPIs if the KPI process is not carefully controlled.

Now at the end of my PhD process I am more aware of why I was so uncomfortable with the KPI zeal I had noted during my MBA studies. This study adds to the evidence supporting the effectiveness of KPIs as a policy implementation technique. I hope this study also adds evidence supporting caution when KPIs are suggested. My own passion for teaching has been sharpened and elevated by the long process required to complete this study. As I return to the lecture hall I am more aware than ever of the need for diligent reflection. Without reflection it will be easy to let explanations of specific techniques displace the more difficult task of considering the impact of our administrative activities. Now more than ever I believe good leadership requires careful consideration and control over administrative practice.

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Appendix A

Appendix A: First Consent letter

Stephen G. Kerr
4203 – 51 Street
Athabasca, Alberta
T9S-1J4
(780) 675 - 1902

Date
Name

Dear Name:

I am presently conducting a study into the accountability policy of the Government of Alberta. This research project is part of my doctoral studies in the Faculty of Graduate Studies under the guidance of the Department of Educational Policy Studies at the University of Alberta.

The purpose of this study is to consider the role of Key Performance Indicators in the process of policy implementation. I will be doing this by specifically considering the use and impact of KPIs on AECD policy and the University sector.

I would like to interview you as part of this study. As a key official (at AECD or on the University Co-ordinating Councils KPI committee) you can provide me with valuable assistance. The purpose of the interview will be to discuss key public documents regarding the KPI project and obtain your opinion about the completeness of my document list and the interpretation of developments surrounding the documents. You will be provide with a list of documents and my questions well in advance of the interview. The interviews will take from 30 – 45 minutes.

This project is being conducted in compliance with the Ethical Guidelines established by the University of Alberta. To that end the following steps have been taken to ensure that your participation in this study does not place you in an awkward position or cause you any harm.

1) Our interview will be kept strictly confidential. Your identity will not be revealed in my final report and no references to you, other than information contained in existing public documents will be included in my report.
2) I will provide you with a transcript of our interview so you may confirm that the answers you provide in the interview fairly reflect your views. The interview data will not be acted upon until you have given me permission to use the transcript.
3) At any time up to publication of the research report you may withdraw from the study and I will destroy the interview material you have provided with me and also remove any interpretations of the data arising from the answers obtained from you.
4) There are a number of people that are qualified to provide the information I am seeking from you. So while your opinion is valuable and helpful to me, you should not in any way feel pressured that a decision by

you, for any reason, to not participate will harm my educational and research goals.

Thank you for considering my request. I will soon be in touch by phone to discuss this request with you.

Yours truly,

Stephen G. Kerr, MBA, CMA
PhD Candidate.

I ____________________ have read the information about your study in this letter and understand your research purposes and that my participation is confidential and my consent can be withdrawn at any time up to the publication of the study.

Signed ______________

Appendix B: Second Consent Letter

Stephen G. Kerr
4203 – 51 Street
Athabasca, Alberta
T9S-1J4
(780) 675 - 1902

Date
Name

Dear Name:

Thank you for the interview you gave me on DATE. Further to my letter of Date 1999, I have enclosed a copy of the transcript of that interview for your review.

The contents of this transcript and your identity will not be revealed in my research report. However I will be making use of your comments to shape my analysis of the KPI documents we discussed. To ensure that I do not proceed in a way the could cause you any concern or harm, could you please refresh your consent to participate in this study that was originally provided on DATE.

Yours truly,

Stephen G. Kerr, MBA, CMA
PhD Candidate.

I ______________ have read the information about your study in this letter and your letter dated DATE and understand your research purposes and that my participation is confidential and my consent can be withdrawn at any time up to the publication of the study. Having now read the transcript of my interview with you, I still freely consent to your use of the answers provided in the manner explained in your letter of DATE.

Signed ______________

Appendix C: The Key Performance Indicator Data Sets

1. ACCESS:

Measures of student participation that may be used to indicate accessibility to post secondary programs, levels of service provided by institutions and volumes of instructional activity.

2. COMPLETION:

The purpose of the program completion indicator is to show whether students complete their programs of study over a reasonable period of time. The completion rate is the proportion of an entry cohort, expressed as a percentage, who complete a one year or shorter program within two years, or a two year or longer program within three years, following the earliest year in which a full time student with a full program load would normally be expected to complete the program. Completion rate are calculated to include those who complete the program and those who transfer to and complete other programs.

3. UNIVERSITY TRANSFER PROGRAM LEVERS:

The purpose of this indicator is to provide information with respect to the performance of Approved University Transfer programs at the seven colleges with such programs. Two important rates traditionally used by the department and ACAT will be calculated and reported so as to reflect the various possible outcomes of a University Transfer program. These are the percentage of the total number of full time students in a University transfer program that transfer in a subsequent year, and the percentage of leavers that transfer after leaving the program.

The University reporting manual refers to this as FRESHMAN STUDENT PERSISTENCE:

Measures of persistence for students new to the first year of undergraduate programs at a University. Attrition between September1 and December 1 is determined and a first session retention is calculated. The number of students returning in the following year is determined and first to second year retention rate is calculated. First year levels are categorised as those required to withdraw, those who transferred to other Alberta post secondary institutions and other not returning.

4. TRANSFERABILITY OF COURSES:

The purpose of this indicator is to provide some indication of the transferability of courses among Alberta colleges and technical institutes and Alberta Universities and private colleges with accredited degree programs. Information provided through the transfer guide published annually by ACAT will be analysed to provide quantitative indicators of the extent of transferability of courses and multi course transfer agreements.

In the University guide this is replaced with TRANSFER STUDENT PERFORMANCE, and the data collected allows comparison of transfer programs and comparison with direct entrance.

5. COST PER STUDENT AND COST PER STUDENT CONTACT HOUR:

Measures the unit costs of programming to indicate that resources are used efficiently over time and that costs of programs are comparable to those of similar programs at others institutions of comparable size, location and function.

This measure is called FISCAL MANAGEMENT - COST PER STUDENT: COST PER GRADUATE, in the University Guide. This combines indicator five and six for the university sector.

6. COST PER GRADUATE (PROGRAM COMPLETER):

The average cost per graduate is a measure of the unit costs used to indicate that resources are used efficiently and that costs are comparable to those for similar programs at other institutions of comparable size, location and function.

7. EMPLOYMENT AND ACADEMIC STATUS INDICATORS:

The purpose of this information set is to determine the extent to which graduates of career, professional, training and general programs find employment related to their education and training within a reasonable period of time, pursue post graduate academic objectives or have intentions to do so.

8. SATISFACTION INDICATORS:

The purpose of this information set is to determine the extent to which graduates are satisfied with and indicate benefits from the education or training they have received.

9. DEMAND AND CAPACITY:

The purpose of this information set is to show the level of demand for credit programs and the degree to which demand is being met by program opportunities (capacity). Various measured will be used to indicate whether there is sufficient level of demand for programs and whether appropriate structures (institutions, faculties, departments, programs) are in place to meet the demand.

This section is expanded in the University guide and renamed COMMUNITY SERVICE AND ECONOMIC IMPACT to capture the broader mandate of University professors, relative to college instructors.

10. FACULTY INSTRUCTIONAL LOADS:

The faculty instructional loads indicator provides information to assess the instructional loads of teaching units and the average teaching loads of faculty members.

In the University guide this is called FISCAL MANAGEMENT - FACULTY WORKLOAD.

11. SPACE UTILISATION:

The space utilisation indicator provides general measures of the intensity of utilisation of classroom and class laboratory facilities for credit instruction, non credit activities and community services.

12. REVENUE - RELATED INDICATORS:

Grants and tuition are compared to FTE and other revenues.

13. EXPENDITURE - RELATED INDICATORS:

The following expenditure related indicators will be reported at the institutional level: -Instructional expenditures as a percentage of total operations expenditures,-the total of academic support and student services expenditures as a percentage of total operations expenditures -the total of institutional support; computing, network & communications and facilities operations & maintenance expenditures as a percentage of total operations expenditures.

Six additional indicators apply only to Universities. These Indicator sets apply to the research mandate which is unique to the University sector.

14. RESEARCH INTENSITY:

This indicator measures the intensity of research in relation to the total sphere of institutional actives. The indicator is structures as a research intensity ratio which relate revenues for sponsored research and related activities to provincial operating grant support. ... Data will be obtained to calculate three year rolling averages for each Alberta university (excluding Athabasca University) and for peer group comparisons with similar Canadian institutions.

15. RESEARCH - PUBLICATION AND OTHER CREATIVE WORKS:

Research performance can be reflected by the citation impact of research papers produced by University faculty members. The degree to which these papers contribute to and influence the field or fields to which they apply is reflected by the citation impact of these papers. ... Data will be obtained to calculate five year rolling averages for each Alberta University (excluding Athabasca University) and for peer group comparisons with similar Canadian institutions.

16. RESEARCH - COUNCIL SUCCESS RATES:

National granting councils use relatively similar criteria applied consistently over time to adjudicate national peer review grant competitions. In these competitions, a variety of factors are taken into account including the quality and innovativeness of the proposed research and the reputation, professional contributions, published results, and past performance of the researchers. On the assumption that faculty members undertaking quality research will fair well in these competitions...

Data will be obtained for each Alberta University, and were available for peer group comparisons with similar Canadian Institutions.

17. RESEARCH - GRADUATE STUDENTS:

Graduate students enrolled in thesis programs participate in and contribute to the research mandate of the university and quality faculty members engaged in research and scholarship attract students desiring research degrees. Accordingly, the higher the portion of thesis based program graduate student enrolees to the academic staff, the more research intensive and higher the quality of the academic staff and research of the university. .... For each of these indicators and each university, data will be obtained for a number of similar Canadian institutions.

18. RESEARCH - RESEARCH IMPACT:

These indicators measure returns form investments in research facilities, activities and infrastructure at Alberta Universities. Research funds from all sources have an important economic impact on the local or regional economy, in terms of employment and job creation as well as through other types of expenditures in the local economy. ... For each of these indicators and each university, data will be obtained for a number of similar Canadian institutions .

19. RESEARCH - DISTANCE EDUCATION

Athabasca University is developing a special indicator for research relating to distance education. Documentation has not been completed.

Appendix D: Expert Interview Schedule

- ✓ Self introduction
- ✓ Review of the consent letter

1. How was the Alberta Government's accountability policy developed?
    - Were any of the documents in Figure 5.1 particularly significant? Why?
    - Has AECD become more of an agent than a department?
2. What was the impact of Government policy on AECD policy?
    - How did you see AECD respond to the government's accountability policy?
    - Were there any particularly significant events concerning documents in Figure 5.2?
    - Can you think of any ACED initiatives that appear solely to improve a KPI measure?
3. How did AECD develop its key performance indicators?
    - How and when did the KPI project in AECD start?
    - Was the KPI project changed by the government's accountability policy?
    - Were there any particularly significant events concerning documents in Figure 6.1?
4. What outcomes did AECD expect from the introduction of KPIs?
    - When the KPI project started what did AECD want to achieve?
    - Did AECD treat KPIs differently than the government?
    - Has the discussion about mandates vs. system goals changed what AECD expects?
    - Do KPIs communicate policy or do the monitor progress?
5. How did the university sector react to the introduction of KPIs?
    - Did actual institutional behaviour change?
    - How did accountability activities in the institutions change?
    - Why are there so few public formal reactions to the KPI project by the institutions?
    - What significant issues developed during the pilot stage of the KPI project?
6. How do the KPIs as an implementation technique reflect the accountability policy?
    - Has the process produced undesirable or unexpected changes in the system?
    - Have KPIs overshadowed other accountability processes? Boards? Mandates?
    - Has KPI usage increases the independence if the institutions as agents of AECD?

Appendix E: Government Key Performance Indicators

1. Literacy and Numeracy levels of Albertans: For Albertans to participate fully in our society, they need to achieve basic levels of literacy and numeracy. These measures will track the basic education skills of Albertans.

2. Educational Attainment: Combined with basic literacy and numeracy, it is important for Albertans to expand their learning and skills to meet their own personal goals and to ensure that Alberta continues to have a highly educated and skilled workforce. This measure will track the level of education that Albertans achieve.

3. Skill Development: With a rapidly changing environment, Alberta businesses and industries need to be able to compete in markets around the world. That requires a highly skilled workforce. This measure will track the training and skills of our workforce, including the number of trades-people certified in Alberta.

4. Economic Effect of Spending on Research and Development: Research and development is essential to keep Alberta at the forefront of new ideas and innovation. The amount of money spent on research and development is linked to economic prosperity and an enhanced quality of life. This measure would include an assessment of the number of jobs created, the financial impact and the number of new patents and registrations resulting from spending on research and development.

Appendix F: The AECD Performance Indicators

1. Learner Satisfaction Index: True success of the adult learning system will be measured by the quality of the outcomes. The views of recent users about the responsiveness of the adult learning system to Albertans' needs reveals how they regard the systems ability to react and respond to economic, social and cultural goals.
2. Employability Indicator: Through education and training, Albertans expect to acquire the attitudes, skills and knowledge to participate in a changing economy and workforce. The proportion of graduates employed in jobs related to their education and training provides an indicator of the effectiveness of the system. The department will measure: a) the proportion of graduates from universities employed related to their education and training, b) the proportion of graduates from colleges and technical institutes employed related to their education and training, c) the proportion of graduates from short-term labour market preparation programs employed related to their education and training.
3. Adult Literacy Indicator: Proficiency in reading and numeracy is critical to our individual and collective social, cultural, and economic success. This indicator is one measure of the performance of Alberta's total learning system from cradle to grave. The department will use Statistics Canada definition for literacy which is: The information processing skills necessary to use the printed material commonly encountered at work, at home and in the community.
4. Research Excellence Indicator: Creation of knowledge is essential to the well being of Albertans and prosperity of the province. The amount of federal research dollars awarded to universities is an indicator of the level and quality of research activities as Alberta Universities. This

measure is national in scope and allows comparisons with other provinces.

5. Accessibility Indicator: Learning throughout life is key to Alberta's future economic success. This indicator will measure the extent to which adult Albertans have access to and have accessed training opportunities. The accessibility indicator will measure total enrolment in adult learning as a proportion of adult Albertans.
6. Cost per Graduate Indicator: Provides an indicator of the cost to graduate a student as a measure of the cost effectiveness of the publicly supported system. The department will measure cost per graduate per year for: a) graduates from universities, b) graduated from colleges and technical institutes, and c) graduates of short term labour market preparation programs.
7. Cost per Student Indicator: Measures the cost of delivering learning programs to the equivalent of a full time student as a general measure of efficiency of the publicly supported learning programs. The department will measure cost per participant per year for: a) students in universities, b) students in colleges and technical institutes, and c) students in short term labour market preparation programs.